OLD!

THE ESSENTIAL GUIDE TO CLASSIC GAMES

retro GAMER

AMSTRAD | COMMODORE | SEGA | NINTENDO | ATARI | SINCLAIR | NEO GEO | SONY | COIN-OP | MOBILE

STREETS OF RAGE

BEHIND THE SCENES OF SEGA'S SUPERB SCROLLING BEAT-'EM-UP

SABOTEUR

THE BEST MOMENTS FROM DURELL'S 8-BIT MASTERPIECE

Punch-out!!

CREATORS REVISIT THE HIT **FRANCHISE** THAT ALWAYS **PUNCHED** ABOVE ITS **WEIGHT**

NEO GEO CD CLASSICS

11 GAMES FOR SNK'S ADD-ON THAT REALLY NEED INVESTIGATING

DRAGON NINJA

EVERY BOSS, EVERY CONVERSION: YOUR ULTIMATE GUIDE

JULIAN GOLLOP

THE STRATEGY KING ON THE HISTORY OF TURN-BASED GAMES

HARD DRIVIN'

HOW ATARI CREATED ITS REVOLUTIONARY COIN-OP

GRYZOR

IS THE AMSTRAD CPC CONVERSION THE BEST?

ROAD RASH

WHY ELECTRONIC ARTS' RACER IS BRILLIANT FUN

SEGA 32X

IS IT STILL CONSIDERED A FLOP 20 YEARS ON?

IMAGINE PUBLISHING

DigitalEdition

GreatDigitalMags.com

ISSUE 133

18™
www.pegi.info

#WhyIGame

Microsoft

The best games of the year
live on Xbox One

XBOX ONE

SNK

NEO GEO X

ADVANCED ENTERTAINMENT SYSTEM

GOLD

LIMITED EDITION

FREE SPECIAL EDITION
NINJA MASTER'S
NEO-GEO X GAME CARD INCLUDED

NOW ONLY £99.99

Visit: www.funstock.co.uk/retrogamer133

NEOGEO™ X HANDHELD CONSOLE CONTAINS TWENTY CLASSIC NEOGEO™ ADVANCED ENTERTAINMENT GAMES

IN-STOCK & SHIPPED WITH LATEST FIRMWARE

FREE UK Delivery

INCLUDES NEOGEO™ X DOCKING STATION

INCLUDES NEOGEO™ X ARCADE STICK

facebook.com/funstockgames

funstock.co.uk

twitter.com/funstockgames

All logos, trademarks and artwork are the property of their respective owners.

THE RETROBATES

FAVOURITE TURN-BASED STRATEGY GAME

DARRAN JONES

For me it's the *Fire Emblem* series. It boasts a great setting, interesting characters and the constant threat of death if you play poorly.

Expertise:
Juggling a beautiful wife, two gorgeous girls and an award-winning magazine

Currently playing:
Rogue Legacy

Favourite game of all time:
Strider

NICK THORPE

It's got to be *Valkyria Chronicles* – it began an obsession that couldn't be stopped, even by the lack of a UK release for the third game.

Expertise:
Coin-ops, Sega hardware and everything Nineties

Currently playing:
Virtua Tennis 4: World Tour Edition

Favourite game of all time:
Sonic The Hedgehog

PAUL DRURY

It's a genre that I've never fallen for but playing *Advance Wars* convinced me I really should be open to new things…

Expertise:
The arched window

Currently playing:
Metrico

Favourite game of all time:
Sheep In Space

STEVE HOLMES

Frozen Synapse is cool. Other than that though, the mobile version of *Axis And Allies* used to make train journeys better before I got a Vita.

Expertise:
Being indecisive

Currently playing:
Destiny

Favourite game of all time:
The Legend Of Zelda: Ocarina Of Time

JONATHAN WELLS

I'm not really a huge fan of turn-based strategy but if I have to go for one it has to be *XCOM: Enemy Unknown*.

Expertise:
Tackling dirty nappies and retro spreads

Currently playing:
Guacamelee! Super Turbo Championship Edition

Favourite game of all time:
The Secret Of Monkey Island

DAVID CROOKES

I recall playing *Sid Meier's Civilization* for weeks on end, determined to build upon any underlying megalomaniac tendencies I may have had.

Expertise:
Amstrad, Lynx, adventures, *Dizzy* and PlayStation (but is that retro? Debate!)

Currently playing:
Grim Fandango

Favourite game of all time:
Broken Sword

PAUL DAVIES

Hopefully it's okay to say *Final Fantasy Tactics* on the SNES. If not, then *Shining Force* for Mega Drive.

Expertise:
Repeatedly banging my head against a brick wall

Currently playing:
GTA V

Favourite game of all time:
Ghouls 'N' Ghosts

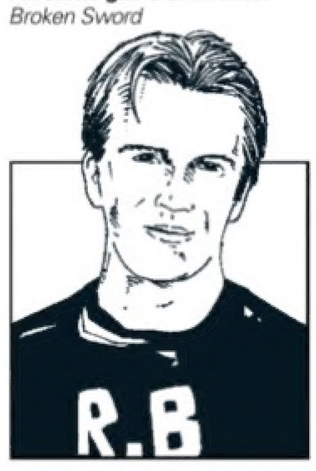
JASON KELK

I never really got into turn-based games, but did spend some time being quite bad at *Eastern Front (1941)* on the Atari 8-bit…

Expertise:
Indie, homebrew and bedroom-coded games

Currently playing:
Star Defence (C64)

Favourite game of all time:
Io



RICHARD BURTON

I'd go for *Sid Meier's Alpha Centauri*. It may not have sold as well as the rest of the series but I'd rate it above any other game in that franchise.

Expertise:
Anything *Manic Miner* or *Jet Set Willy* related

Currently playing:
Hydrofool

Favourite game of all time:
Manic Miner

LOADING...

We've had a few readers write in lately asking why I despise *Dig Dug* so much. It's been a running joke on both games™ and **Retro Gamer** for about 11 years now, and people will take great delight sneaking additional images into the mags to see if they can make my blood boil. The reason I'm not a fan of *Dig Dug* is because of *Mr Do!*, Universal's incredible arcade game that came out the same year, but receives nowhere near as much acclaim (despite being a clearly better game).

It always rankles me that *Dig Dug* constantly appears on compilations, while *Mr Do!* rots away in his clown clothes, the cherries he once coveted now filled with maggots. Yes I know this is the fault of Universal Entertainment Corporation who clearly feels that there's no interest in the once popular clown, but that doesn't make it any easier to accept. Particularly as it means that he becomes more forgotten

I don't really hate *Dig Dug*, but I've never been a big fan of Namco's game. Yes it has some clever gameplay mechanics, but the ones found in *Mr Do!* are arguably better (and yes, I'm well aware that Universal's game came later). I guess ultimately, I'm just a big fan of an underdog.

retro GAMER

GAMING ICON

Is Tim Schafer gaming's greatest icon?

With the new generation now in full swing we felt it was the perfect time to celebrate some of gaming's biggest icons for an exciting upcoming feature.

Help **Retro Gamer** find the many important individuals who have turned our favourite pastime into one of the world's biggest forms of entertainment, so that we can give them the recognition they deserve in a future issue. Whether you believe it was Shigeru Miyamoto who refreshed the gaming landscape, or that Nolan Bushnell heralded the start of the industry as we know it, we'd love to have your input. As always the best suggestions will appear in the magazine, so take this chance to join in the celebrations and have your say.

You can tell us about your favourite industry veterans on the **Retro Gamer** forum, our Facebook page, or even via Twitter using **#videogameicons**.

We look forward to your suggestions…

THE SECRET OF MONKEY ISLAND

DAY OF THE TENTACLE

GRIM FANDANGO

PSYCHONAUTS

BROKEN AGE

CONTACT US NOW!

What's your favourite Tim Schafer game? Let us know

RetroGamerUK

@RetroGamer_Mag

retrogamer@imagine-publishing.co.uk

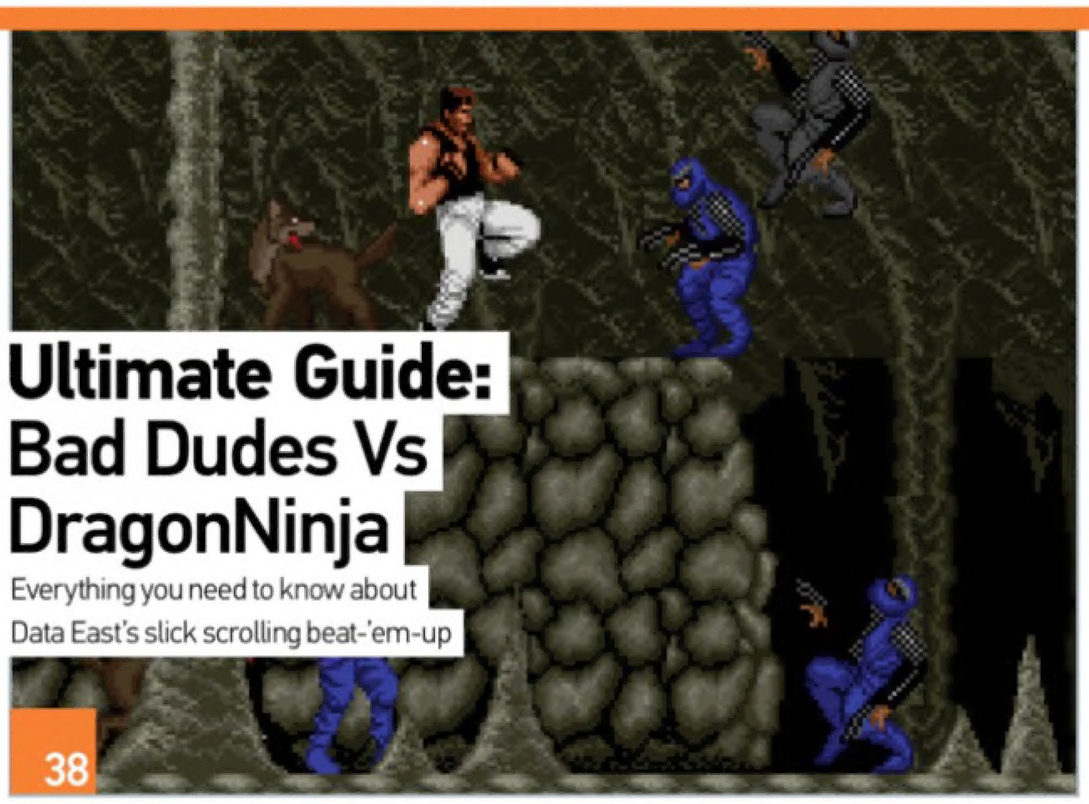
www.retrogamer.net/forum

"I don't know if I would advise anybody to copy me. Sometimes the things I do, or we do as a company, come from an actual compulsion"

Tim Schafer

CONTENTS

>> **Load 133** Breathing new life into classic games



Ultimate Guide: Bad Dudes Vs DragonNinja

Everything you need to know about Data East's slick scrolling beat-'em-up

38

The History Of Punch-Out!!

Key developers, including Makoto Wada celebrate 30 years of Little Mac

24

RETRO RADAR

10 **Remastering Resident Evil**
How Capcom is updating its classic GameCube title for a HD generation

12 **News Wall**
All the latest news, including a look at an exciting new Silent Hill game

14 **The Vault**
Got some money to waste? Check these goodies out

15 **Discuss**
Readers weigh in on the recent obsession publishers have with HD remasters

16 **Paul Davies**
The former editor of *C&VG* ponders why he still loves playing videogames

18 **A Moment With Nick Burcombe**
The ex-*WipEout* developer discusses his Vita port of *Table Top Racing*

19 **Retro Diary**
Be it past or present, here's everything that happened this month

20 **Back to the Nineties**
Richard Burton reveals the highs and lows of August '97

The Bluffer's Guide To Turn-Based Strategy

74

REVIVALS

22 **Reader Revival: Conan: Hall Of Volta**
Why Conan rocks on Apple II

60 **Retro Revival: Gryzor**
What's the best 8-bit port? Here's a clue, Darran's writing about it

98 **The Lucky Dime Caper Starring Donald Duck**
Nick Thorpe shares his love for this entertaining Master System romp

FEATURED

32 **Classic Moments: Road Rash**
Get on your bike and relive the greatest bits from EA's 16-bit hit

34 **Making Of Finders Keepers**
Creator Dave Jones reveals the origins of the first Magic Knight adventure

44 **Fred Harris: Micro Man**
Paul Drury interviews the heart and soul of Eighties show *Micro Live*

56 **The Making Of Hard Drivin'**
Discover how Atari created its innovative arcade hit. No key necessary

62 **Top 25 Amiga Games**
Readers and developers reveal their favourite games for Commodore's 16-bit computer

82 **Classic Game: Saboteur**
All the best bits from Durell Software's action-packed Spectrum masterpiece

92 **In The Chair: Simon Nicol**
The classic coder on *Crazy Comets* and the awesomeness of Rob Hubbard

Minority Report: Neo-Geo CD

Our new look Minoirty Report focuses on the best games for SNK's console

52

Don't forget to follow us online for all the latest retro updates

RetroGamerUK @RetroGamer_Mag retrogamer@imagine-publishing.co.uk

SUBSCRIBE TODAY! AND SAVE 50%
You'll be seeing stars if you don't get a sub
Subscribe at www.imaginesubs.co.uk

Vistit the **Retro Gamer** online shop at imagineshop.co.uk for back issues, books and merchandise

20 years of: Sega 32X

Nick Thorpe investigates if Sega's add-on was as bad as everyone remembers

84

Future Classics: Dark Souls

72

From The Archives: Martech Games

46

> **"Many arcade games back then were realistic, and I think it was simply a trend"**
>
> Atsushi Seimiya

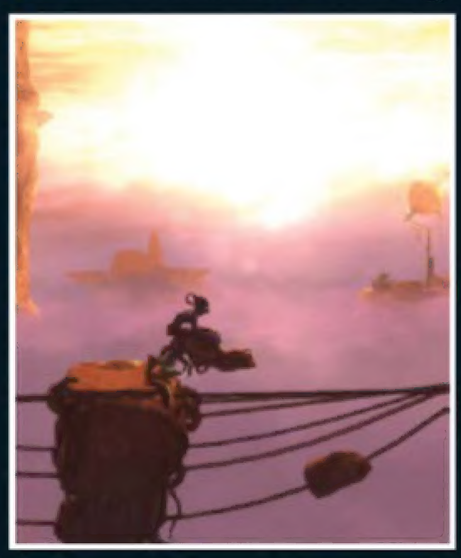
The Making Of: Streets Of Rage

Atsushi Seimiya re-walks the streets of Sega's answers to *Final Fight*

68

REVIEWS

100 **Oddworld: New 'N' Tasty**



102 **The Rhythm Of Fighters**
102 **Spaceman Dave**
102 **Table Top Racing**
102 **Crazy Taxi: City Rush**

ESSENTIALS

90 **Subscriptions**
Knock out the competition by getting a monthly sub

104 **Homebrew**
Jason Kelk looks at more new games released for classic systems

108 **Mailbag**
Your chance to tell us what you've been up to each month

111 **Next Month**
Want to know what's happening next issue? Wait no longer

114 **End/Game**
Clones and deception as we look at the end of *Power Stone*

» Producer Yoshiaki Hirabayashi is clearly in the *Resident Evil* mansion. The wallpaper is a dead giveaway.

REMASTERING RESIDENT EVIL

CAPCOM'S YOSHIAKI HIRABAYASHI ON REVISITING THE CLASSIC HORROR GAME FOR HD CONSOLES

CONTENTS

10 REMASTERING RESIDENT EVIL
Yoshiaki Hirabayashi discusses updating Capcom's classic GameCube hit

12 NEWS WALL
All this month's news, including Activision's surprise announcement of the Sierra brand

14 PAUL DAVIES
This month our favourite columnist ponders why he still plays videogames

15 DISCUSS NEW!
Readers weigh in on the latest hot topics. This month: HD remasters

16 THE VAULT
Got some spare money in your pocket? Here's the things that have caught our eye

18 A MOMENT WITH NICK BURCOMBE
The ex-*WipEout* dev talks *Table Top Racing*

19 DIARY
Our final diary takes a look at everything that has and will happen in the world of retro

It would appear that horror is the big new thing at the moment. We're just weeks away from Shinji Mikami's *The Evil Within*, Hideo Kojima has been causing gamers to have heart attacks with his creepy playable demo for *Silent Hills*, while *Alien: Isolation* has already caused Darran to make girly shrieks in the office while playing a recent demo.

With all the focus on horror, it's rather fitting that Capcom, too, has a game planned. No it's not *Resident Evil 7* (although we're sure that's coming eventually) but a brand new remaster of its classic GameCube game, which itself was a reboot of the original PlayStation hit.

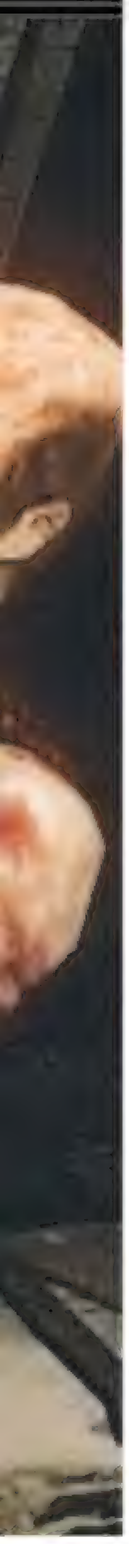
We were lucky enough to catch up with producer Yoshiaki Hirabayashi about the remaster. Interestingly, it's not a brand new remake in the style of *Oddworld: New 'N' Tasty*, but a careful remastering of the GameCube original. So why did Capcom not want to remake the game from the ground up again? "I think from the perspective of our customers the original GameCube version of *Resident Evil* is a masterpiece of survival-horror," explains Hirabayashi. "By carefully remastering the game, we want to give fans new and old alike an experience as close as possible to the original."

The original GameCube remake is celebrated, not just because of its fantastic visuals, but because Capcom added a huge amount of new content to the gameplay, making it notably different to the PlayStation original, but familiar enough that it doesn't feel like a completely new game. "The GameCube version is already packed with additional content over and above the 1996 PlayStation version, and we've decided not to alter its balance by adding any new enemies or story elements," continues Hirabayashi. "We have added support for a more modern control scheme and a widescreen display mode."

Although no gameplay changes have been made to the game, Hirabayashi and his team are still adding plenty of cosmetic differences

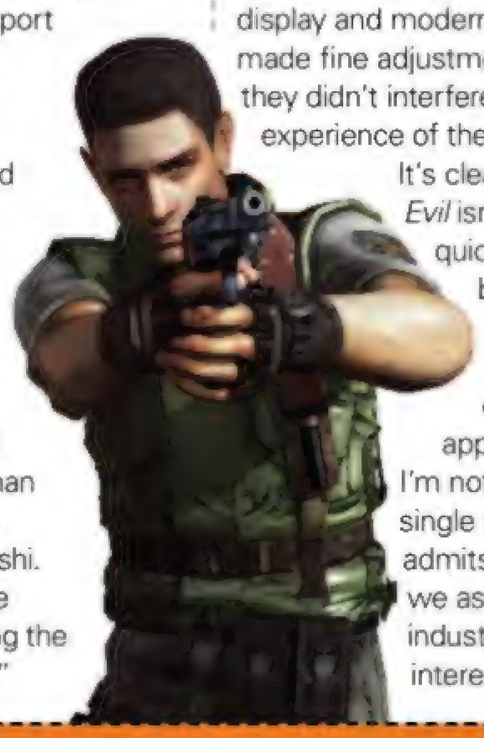
» [PS3] The new remaster will allow you to relive classic moments like this.

[PS3] While the PS4 and Xbox One versions will run at 1080p, PS3 and Xbox 360 will run at 720p.



so that the GameCube classic will be able to once again shine on HD consoles. "Players will be able to select a new, more modern control method where pushing a direction on the analogue stick moves your character in that direction," begins Hirabayashi. "They can also opt to zoom the image to fill a widescreen display – but we made sure that instead of a hard crop where parts of the image are lost completely, the screen will intelligently scroll vertically as your character moves. Both of these features are optional and can be turned on and off at any time during gameplay. And of course, the game will be in 1080p and support high-quality 5.1-channel surround sound."

Those expecting new voiceovers will be relieved (or dismayed) to know that no new ones will be added (something that's cropped up in past updates). "We're using the original audio to bring the original experience back rather than changing it to something new," confirms Hirabayashi. "However, we have done some extra work polishing the subtitles in all languages."

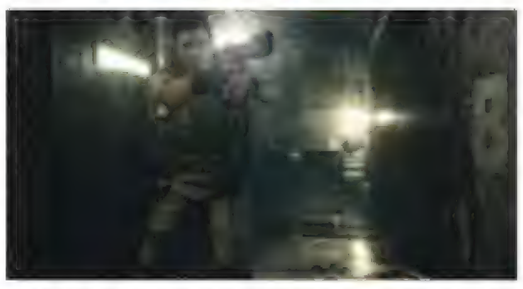


Hirabayashi's team has been working on the remaster's production for a year and was keen to point out that it's needed quite a lot of work to transfer it across to newer consoles. "The latest console hardware is capable of so much more than was possible at the time, but I don't think horror atmosphere is something that can necessarily be achieved with raw processing power," he admits. "The GameCube game was developed with great attention to detail, so we in turn have taken extreme care while remastering the game in considering how to bring those details to life. Even when adding options like widescreen display and modernised controls, we made fine adjustments to make sure they didn't interfere with the gameplay experience of the original game."

It's clear that *Resident Evil* isn't going to be a quick and dirty port, but it doesn't really explain why HD remakes of old games keep appearing. "Honestly, I'm not sure there is a single clear answer," admits Hirabayashi when we asked him about the industry's increasing interest in HD remasters. "Speaking personally as a gamer, I can say that being able to play classic games on new hardware is something I find very exciting, so I'm sure there must be a lot of players out there who think the same way!"

Of course it also helps that *Resident Evil* remains widely regarded as one of the best survival-horror franchises of all time, with the GameCube reboot still considered as one of the finest remakes around, some 12 years later. "I would say because the game has everything players want from a survival-horror game, balanced perfectly, making it stand out as a true classic," argues Hirabayashi on the game's enduring appeal. "Also, purely on an audio-visual level the game was made with the utmost care and attention to detail and continues to be captivating all these years later."

Of course, what we really want to know is whether Capcom will throw caution to the wind and give *Resident Evil 2* a similar makeover, rebuilding it from the ground up for a new generation of gamers. "Speaking for Capcom, I'm afraid I can't answer that question, but *Resident Evil 2* is one of my own personal favourite games, so as a *Resident Evil* fan I would also like to see that happen."



[PS3] The biggest change is the new widescreen option, although purists can stick with a 4:3 setup.

READERS WEIGH IN

WILL YOU BUY RESIDENT EVIL HD?

MEGAMIXER

■ I'll wait to see how it fares technically and whether a decent job has been done. If the final product is inferior to the GC version in any way then I won't bother as I already have that version on my shelf.

RESIDENT PAUL

■ If it is downloadable only then it is a 'No', as I like a physical copy only!

DAM

■ Yeah I'll be buying, it must be nearly ten years since I played the Cube version, and I was actually thinking about starting to play through it again, so might as well wait for the PS3 version now I guess.

THE MANY FACES OF RESIDENT EVIL

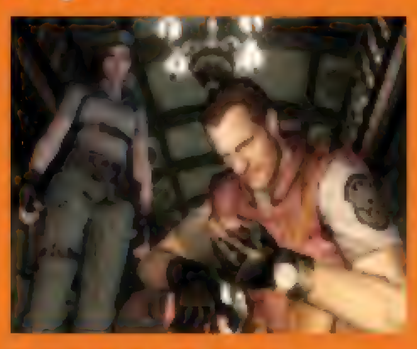
>> Capcom's classic horror game appears in many forms...

RESIDENT EVIL 1996

■ The original *Resident Evil* was massive, ushering in a new type of horror game and introducing gamers to the adventures of Chris Redfield and Jill Valentine. Set in a mansion, it's notable for its terrible voice acting, clunky controls and impressive pre-rendered backdrops. It was also released for Sega's Saturn and PC.

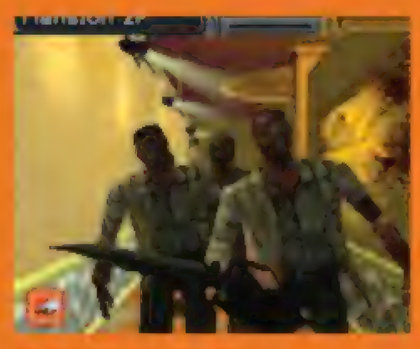
RESIDENT EVIL: DIRECTOR'S CUT 1997

■ Released to compensate for the sequel's delay, this director's cut's biggest change is a new 'arranged' mode that changes the location of items and monsters. A 'beginner' mode is also included while a new handgun gives you the opportunity to get instant headshots on zombies with any shot fired.



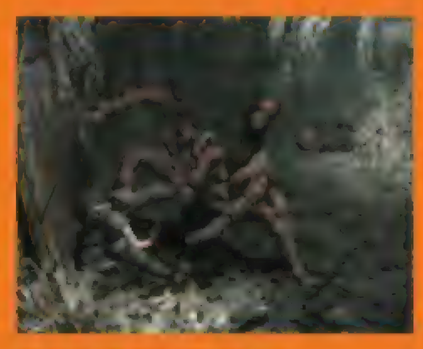
RESIDENT EVIL 2002

■ This exclusive GameCube release is still widely regarded as the greatest remake of all time. It contains plenty of new locations and enemies, while the backgrounds are now made from FMV. Its script was rewritten to be less cheesy and a new cast was added. There's a new difficulty mode called 'Real Survivor'.



RESIDENT EVIL: DEADLY SILENCE 1996

■ Created to celebrate the PlayStation game's tenth anniversary, *Deadly Silence* features a 'Classic' mode as well as 'Rebirth', which introduced more enemies and puzzles. It also introduces later mechanics from *Resident Evil 3* and *4* like the 180-degree turn and tactical reload.



RESIDENT EVIL ARCHIVES: RESIDENT EVIL 2008

■ Released to make use of the Wii's controller, this is an otherwise basic port of the classic GameCube game that doesn't add any new features. It also features GameCube controller support, but didn't really offer anything over the GameCube original.

The atmospheric trailer that Activision used to announce the return of Sierra.

THE RETURN OF SIERRA

ACTIVISION ANNOUNCES THE RESURRECTION OF THE CLASSIC GAMES LABEL

Originally set up as On-Line Systems in 1979 by Ken and Roberta Williams, Sierra Entertainment became popular for its excellent and often groundbreaking graphic adventures. Famous developers such as Al Lowe and Jane Jenson made their names at the company back in the day, and the publisher received much critical acclaim. It was eventually absorbed into parent company Activision in 2008, seemingly to pass into the mists of time.

Activision has had second thoughts however, recently announcing the return of Sierra at Gamescom 2014, with the news of two new games: *Geometry Wars 3: Dimensions* and *King's Quest*. "The decision to relaunch Sierra was mainly due to a desire by a small, passionate team within Activision to start engaging with indie developers on smaller, innovative products," reveals Bob Loya, senior director of external development at Sierra. "Once we started engaging with indie developers and looking at a prospective portfolio we really felt we needed a label that represented the indie spirit as well as innovative, best-in-class content. Sierra was the perfect fit."

We were keen to know why the two diverse games were picked, as they couldn't appear more different. "Sierra will have a diverse portfolio, covering many different gaming genres and styles," Bob continues. "We wanted to lead with a couple titles that represent two very distinct gameplay styles, while at the same time representing high quality, innovative experiences."

News on the new *King's Quest* game was a little cagier though… "It's still a bit early so I won't go into too much detail, but the next *King's Quest* will be an adventure game, and is a re-imagining of the series with new, never before told stories."

[PC] There's no news on the new *King's Quest* game, but we do know it's heading to Steam, PSN and Xbox Live.

Both games will be digital and are a while away, but Bob is well aware of the pedigree that comes with the Sierra name. "Sierra was a pioneer of innovation – way ahead of its time," he admits. "The brand represented very high quality production value focused on narrative, new graphical styles, and musical composition. Sierra games were always pushing the boundaries of technology, graphics, and of course, storytelling in games. When you bought a Sierra game, you knew you were getting a product that was created with love, effort and passion."

SSI VETERANS FORM NEW COMPANY

Former Strategic Simulations Inc staff David Shelley and Paul Murray have formed a new company, Tactical Simulations Interactive. The two are veterans of the 'Gold Box' era at SSI, when licensed *Dungeons & Dragons* role-playing games including *Pools Of Radiance* and *Curse Of The Azure Bonds* were produced. The games stopped when Interplay won the licence from SSI, and the company was absorbed by Mindscape in 1994. Shelley has promised that TSI will bring "a return to providing the player full control of their party, with a focus on creating immersive and unforgettable story experiences."

TSi
Tactical Simulations Interactive

PLOK COMIC COLLECTION LAUNCHES

If you missed Plok's appearance in our feature on gaming underdogs in issue 123, there's a good chance that you'll be unaware of his adventures as an online comic character – the titular hero of the 1993 SNES platformer has been appearing in weekly strips on the Pickford brothers' website www.zee-3.com for over a year now. As a result of his popularity, the first 26 strips have now been collected as an eBook, which features character biographies and sketches. The eBook is already available on Amazon, if you're looking to pick it up.

NO.1 FOR PLAYSTATION GAMING

www.play-mag.co.uk

FREE DISC EVERY ISSUE

PLAY

Available from all good newsagents and supermarkets

BUY YOUR ISSUE TODAY

Print edition available at www.imagineshop.co.uk

Digital edition available at www.greatdigitalmags.com

Available on the following platforms

Print Tablet Phone Desktop

facebook.com/PlayMagUK twitter.com/PlayMag_UK

the vault

THE COOL RETRO STUFF THAT WE'VE HAD OUR EYE ON THIS MONTH

PICK OF THE MONTH

Street Fighter Monopoly

If you want something to liven up your games of *Monopoly*, this *Street Fighter* themed board should do the trick. The game features themed pieces like Vega's mask and Chun-Li's spiked bracelet, while the themed properties see the eternally hopeless Dan Hibiki occupying the Old Kent Road spot. However, what we like best is that it actually lets you play with Bison Dollars.

Price: £44.99 **From:** funstock.co.uk

Retro Gamer Coasters

Erase annoying drink rings and get a blast of nostalgia at the same time with our awesome coasters. Available in packs of four, these tough durable coasters feature some of the best **Retro Gamer** covers we've ever produced, making them perfect for your loved ones.

Price: £4.99 **From:** **www.imagineshop.co.uk**

Earthworm Jim Action Figure

Of all the Nineties platform heroes, Earthworm Jim is one of our favourites thanks to the bizarre humour and high quality of his games. With that in mind, why not have him staring at you as you work, or displayed somewhere fun in your home? The figure is fully poseable and includes a bendy 'unsuited' Jim for the suit to use as a whip.

Price: £20.99
From: www.amazon.co.uk

Luigi Hat

Though we've long since seen the back of 'The Year Of Luigi' we still harbour a lot of affection for Mario's lankier brother, so here's his hat. It obviously works great as part of a fancy dress costume, but we're fond of presenting it to friends and family to let them know that in the grand scheme of things, they're basically our sidekicks.

Price: £9.99 **From:** store.nintendo.co.uk

Atari Messenger Bag

It's multiplayer night at your friend's house and you have just the ticket – a set of paddle controllers and a copy of *Warlords*, perfect for some four-player Atari 2600 action. The only problem is, you need something to carry it all in. Worry not! This messenger bag will not only carry your retro treasures, but inform onlookers of your love for Atari.

Price: £29.99
From: www.gamer-heaven.net

Super Retro Trio

It's easy to go online and look at other people's game rooms with envy – we've certainly done it. However, all of us have to live with the practicalities of retro gaming, too. Sometimes there's just not enough room to have multiple machines set up, or you don't have the necessary hardware. The Super Retro Trio is designed to take care of that problem, offering the ability to play NES, SNES and Mega Drive games. As well as accepting original cartridges, it can utilise original control pads and has a region switch to ensure full compatibility with your software.

Price: £79.99
From: www.funstock.co.uk

DISCUSS

How do you feel about developers remaking their classic games?

Forum
www.retrogamer.net/forum

■ As an older retro gaming fan I prefer minimal changes but at times they can really improve the original. But cheap cash-ins which are simply freemium rubbish, avoid like the plague. **psj3809**

■ If the core playability remains the same or largely how it used to be then I am all for remakes because advances in technology can potentially enhance even a classic. Meddle with the gameplay mechanics though and you are playing with fire. **ncf1**

■ I love a remake and think there's lots of games from the 8/16-bit era that could benefit from today's systems. I would love to see the likes of *Phantasy Star, Buck Rogers* etc given the HD treatment and their ideas expanded upon. The originals would have to be part of the package though. **crusto**

■ I just find it a bit depressing that good games keep getting rehashed on new systems; it strikes me as the industry losing its creative touch and playing safe. **slacey1070**

Twitter
Twitter.com/@RetroGamer_mag

■ Completely support, the classics focused on playability and taking hardware to its limits – great to bring to a new audience. @zx_spectrum_30

■ I loved the *Settlers 2* Anniversary Remake. If they keep the gameplay as is and just improve the looks I say it's a win-win! @deps81

■ I'm mixed. Sometimes it works out well (*Rise Of The Triad, Wolfenstein*). Other times not much (*Alien Syndrome, Yars' Revenge*). @TheDeviot

■ The same way I feel about attempting to kick a sleeping croc in the goolies! Just leave it be. @TheRetrobot

■ It's good if it invokes the right chunks of nostalgia but most get it wrong in my opinion. @hatthewmartley

■ If they resist the urge to upgrade and change the gameplay, I'm all for it. Otherwise, make a new game instead. @RasmusHougaard

■ I'm all for it, especially if they include the original as a bonus! @sheargraphix

Facebook
facebook.com/RetroGamerUK

■ It depends on the game, really. Some don't need it really, (for example, in my opinion, *The Last Of Us*) but some genuinely add depth to the game. But at the end of the day graphics don't define a game. **Finlay Dalziel**

■ If you're a fan of the original game an HD remake won't make you like it more and in some cases ruins the original. **Robert Joseph Patterson**

■ I'd rather own the originals, but it's good to get multiple titles on one disc like they did with *Kingdom Hearts 1.5*. **Phil Cocking**

■ I'm not that interested in them. Great games last the course of time without being updated and graphics aren't everything. **Neil Mulvaney**

■ I'd rather have backwards compatibility on new consoles if I want to play 'last gen' games. HD remasters are for the most part just an easy way to make gamers buy the same game twice. **Peter Snoeren**

What We Think

■ Developed with care and attention, remakes can be brilliant – you only need to play *Oddworld: Abe's 'N' Tasty* or *Resident Evil* on GameCube to see that. There's always a risk that they'll turn out bad, but thankfully a bad remake doesn't erase the originals we love.

Nick Thorpe

retro radar column

Here's my bio... Paul Davies

In 1992 I started out on *Mean Machines Sega* and *Nintendo Magazine System*. In 1995 I became editor of *C&VG*. I led the *C&VG* website from 1998 until Christmas 2000, then I left journalism to be concept design manager at Criterion Games. I returned to journalism in 2002 and from 2005 I've been running my own company, Unlikely Hero.

The Original Sin

Remember when we used to enjoy games because playing them was awesome? Well, I was almost forgetting – almost starting to believe that games were invented just so we could write about them.

Regular **RG** readers might recall that I've ranted along similar lines a while back; that videogames journalism has become lost up its own behind, obsessed with political and sociological context. I've since been educated that such writing is valuable, so fair enough. I guess, yes, examining the role of videogames in our lives is necessary, and the increasing number of articles from articulate authors points to the potential of videogames not just within entertainment but in communicating ideas.

Then again, I played *Titanfall* recently for about four hours straight and the last thing I wanted to know before, during or afterwards is how much of this was politically correct or likely to cause riots. Same with the *Destiny* Beta, *The Last Of Us*, *Dark Souls* and a few hours with *Final Fantasy XIV*.

But this is all fascinating, really, seeing how far we've come since hopping onto the sofa to play something like *Punch-Out!!* against our pals. In recent years, or even with something like the *Dune II* RTS and its competing houses of Ordos, Atreides and Harkonnen, games try to carry meaning. Case in point – *Wolfenstein: The New Order* is far from being a mindless horror show.

I really wanted to share, and open for discussion, how easy it is for me to forget why I chose to pick up a controller for the second time, and then the 100th until I lost count. I think this is pertinent for retro gamers too because something being old and/or rare can become an ulterior motive to discuss the worth of anything. And the joy of owning and hopefully playing something shouldn't be in direct relation to how difficult and/or expensive it was to track down. You might disagree.

Anyway, if we simply want a great story, may as well read a book, watch a movie or see a play. If we want to cure the failings of humanity, and make our world a better place, try being a wonderful person to everyone you meet because that's harder than preaching to a million faceless people.

As for games, I play them because they feel good. They are an interactive experience in essence. In a way, the input and response via the controller, how enjoyable this seems to me, is the same as the hook of a favourite tune. What personally grabs me from the outset, which has been the case since *Donkey Kong*, can be very different to what works for you. Hence we have different tastes in games, which if anything points more to them being an art form than handwringing over thematic content.

I've written so much about games over the years but I just wanted to say something straightforward: the enjoyment of games is in that moment that you, as a person, make a tangible connection with a virtual world that is enjoyable. And the success of games should be that we then feel so good about that moment, or moments, that we are compelled to invite our friends to share in the same thing. Or, am I terribly behind the times?

What do you think?

Do you agree with Paul's thoughts? Contact us at:

RetroGamerUK @RetroGamer_Mag retrogamer@imagine-publishing.co.uk www.retrogamer.net/forum

NEW
From the makers of
HOW IT WORKS

HOW IT WORKS
ILLUSTRATED

Every issue different, every issue amazing

The unique new monthly magazine

On sale now!

Where to get your copy

- All good newsagents & supermarkets
- Online at **imagineshop.co.uk**
- On your iPhone, iPad & Android by visiting **greatdigitalmags.com**

Available on the following platforms

Print · Tablet · Phone · Desktop

a moment with...

» [PlayStation] One of Nick's most memorable games is *WipEout*. He'd go on to work on the excellent *WipEout 2097*.

» [Xbox] Nick was courted to work on Microsoft's first Xbox. The end result was the astonishingly pretty *Quantum Redshift*.

Turn to page 102 for our review

» [PS Vita] Although it was originally released on iOS, *Table Top Racing* works far better with proper controls.

Nick Burcombe

The ex-WipEout coder tells us about the Micro Machines-inspired Table Top Racing

Why port *Table Top Racing* to Vita?
Table Top Racing is a gamer's game. One of the biggest complaints we had with the mobile version was a lack of controller support. In subsequent updates, we added various controllers, but our gut instincts were that Vita is the perfect place for it.

How do you feel about Sony's move away from triple-A Vita releases?
I'm in two minds about it. I'm quite excited to see how indies will fill the gap. Some of the most interesting games are coming from the indie sector right now and I can only see it as a positive for the device, but we also understand that big blockbuster franchises help move hardware. I hope we'll see greater variety in games as Sony's openness to indie devs is making it a very attractive place to publish.

What benefits does the Vita version have over the original iOS game?
On iOS, we've tried to maintain 60hz across the board – iPod fourth gen/iPhone 4 all the way through to iPad Air – but the bottom-end devices have all the post-processing effects switched off, so they are very basic looking. Hitting a solid platform like Vita means there are no compromises at all. Vita has a sensible screen resolution and a little beastie of a GPU, which means that we can have full-screen post-processing effects, full reflections, shadows, bump-mapping and most importantly a rock solid 60hz. Add to this physical controls and ad-hoc/internet multiplayer and I think we would argue this is the definitive version of *TTR*.

What is it you like about racers?
Besides mastering the car and physics, learning the circuits, inching out exploits and bending the rules, I love cars and motorsport in general. It's been my favourite genre since *Revs* on the BBC Micro B, and I'm proud to have worked on some great titles like *WipEout*, *F1* and now *TTR*.

How does working with a small studio compare to your old *WipEout* days?
Actually, the original *WipEout* team wasn't huge – about 15 people as I recall. But the biggest difference from an operational aspect is the access to people, finance and resources. We were in a fairly large company in Psygnosis and then of course, it was sold to Sony. In that respect, it's actually a lot of fun being small again. Development decisions are taken very quickly, the whole process doesn't come to a grinding halt if we want to quick change our minds – we are in control of what we want to make. I think the difference between how we go about it nowadays and those old that is that because so many of us have a lot of experience, we make less mistakes and we know how to fix things quickly. We have a much sharper razor for features too. If we like the sound of an idea and we can try it out quickly, we just crack on and do it – if it doesn't work – take it out. Just don't hang in there trying to fix it if it didn't work first time – too many projects chase just a single idea and miss out on the fluidity of rapid iteration.

» The team at PlayRise has worked on a number of high profile triple-A games, from *WipEout* to *Destruction Derby* and *Blur*.

Have you ever been tempted to make a new futuristic racer similar to *WipEout*?
No comment – except for the fact I'm *always* tempted to make another future racer. It might have to be a Kickstarter or something...

retrodiary

12 September – 9 October

>> A month of retro events both past and present

14 September 2007

■ *Heavenly Sword* is released in Europe exclusively on the PlayStation 3.

17 September 1986

■ Budget software house Firebird releases *Thrust* on the Spectrum for £1.99.

19 September 1985

■ Capcom's atmospheric platform game, *Ghosts 'N' Goblins*, is released in the arcades.

20 September 1984

■ Acornsoft releases a new space trading game called *Elite* on the BBC Micro and Acorn Electron.

24 September 2002

■ Microsoft splashes out $375 million to acquire Rare Ltd.

24 September 2001

■ Sony's delightful action adventure game *Ico* is released on the PlayStation 2.

20 September 2002

■ *Freekstyle*, a motocross racing game by Electronic Arts, is released on the GameCube.

20 September 1986

■ Sega releases its latest coin-op game, the dirt bike racer *Enduro Racer*.

25-28 September 2014

■ The four-day EGX London show is being held at Earls Court, London.

26 September 1991

■ *Solar Jetman: Hunt For The Golden Warpship*, developed by Rare and released by Nintendo, goes on sale across Europe.

26 September 2014

■ Electronic Arts is due to release *FIFA 15* across Europe on Xbox 360/One and PlayStation 3 and 4.

27 September 1985

■ Namco releases *Motos*, a quirky coin-op game involving shunting your enemies off the play area. A bit like sumo wrestling for spaceships.

4 October 2002

■ *Hitman 2: Silent Assassin* is released in the UK on Xbox and PlayStation 2.

3 October 1974

■ Japan Leisure Corporation, later shortened to Jaleco, is founded.

1 October 1979

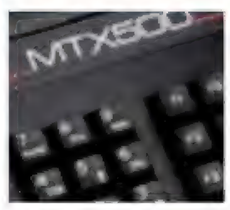
■ Activision, the world's first independent videogames developer for home consoles, is formed.

27 September 2007

■ Live Publishing is dead. The original publisher of **Retro Gamer** goes bankrupt.

7 October 1983

■ Konami's *Track & Field* is released into arcades. Who said games don't provide exercise...



7 October 1983

■ Memotech releases the MTX-500 computer. Stylish, sleek and with virtually no software.

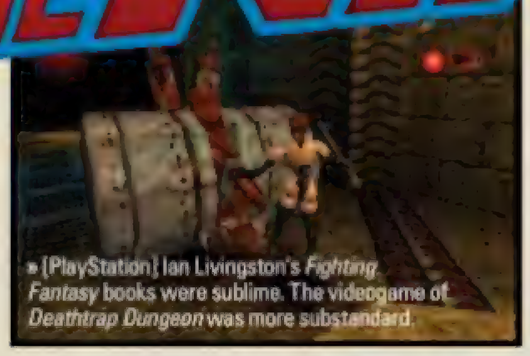
8 October 1984

■ Gargoyle Games unveils its fantastical graphical adventure, *Tir Na Nog*, on the Spectrum. Beautiful but also brick hard.

9 October 2014

■ New issue of **Retro Gamer** hits the streets.

BACK TO THE NINETIES



» [PlayStation] Ian Livingston's *Fighting Fantasy* books were sublime. The videogame of *Deathtrap Dungeon* was more substandard.

AUGUST 1997 – Sega and Bandai happy to be friends, GoldenEye amazes, get vexed by Hexen II, Tomb Raider back for more, Monkey Island becomes cursed while EA launches a Nuclear Strike. Richard Burton grabs the Factor 50,000 sun cream…

» [Nintendo 64] James Bond in a first-person shooter? What's not to like… unless it's *007 Legends*…

THE LATEST NEWS FROM AUGUST 1997

There was surprising news with the collapse of the merger between Sega and Bandai. Negotiations had been ongoing all year with a proposed formation of a videogaming giant, SegaBandai. However, with a matter of days until the agreement was to be signed Bandai pulled out citing the merger could harm the freeform creativity structure it had in place for developing successful projects. The advantages of the merger had also become blurred during the lengthy negotiating period.

Maybe Bandai's phenomenal success with its recently released *Tamagotchi* virtual pet had given it second thoughts, particularly with multiple platform releases of *Tamagotchi* games in development.

Conversely Sega was in a slump with disappointing sales of its Saturn console and its market share being whittled away by the likes of the Nintendo 64 and Sony's PlayStation. However, on a refreshingly positive note both companies stated that they still intended to work with each other in the future.

First-person shooter games were taken to a whole new level this month when the N64 exclusive *GoldenEye 007* was released. Playing Bond you had to thwart the Janus organisation headed by Bond's former friend and MI6 agent Alec Trevalyan (006) who is intent on using the GoldenEye satellite weapon to destroy pretty much whatever he likes.

18 testing levels of gameplay saw a range of skills deployed; fast-paced shooting to thoughtful and tactical levels involving information gathering. A range of weapons and classic gadgets such as Bond's old favourite the laser watch would also be at your disposal.

GoldenEye 007 closely followed the plot of the movie with graphics and sound that really immersed you into Bond's world, with the soundtrack frequently referencing sound effects and music from the movie. *GoldenEye* became arguably one of the greatest first-person shooters made for any system and enjoyed sales of 8 million copies worldwide.

Another excellent first-person shooter offering out this month was

AUGUST 1997

PLAYSTATION

1	Soul Blade (Sony)
2	Dark Forces (Virgin Games)
3	Rebel Assault 2 (Virgin Games)
4	Porsche Challenge (Sony)
5	Tomb Raider (Eidos)

PC

1	X-Wing Vs Tie-Fighter (Virgin Games)
2	EA Cricket '97 (Electronic Arts)
3	Championship Manager 2 (Eidos)
4	Theme Hospital (Electronic Arts)
5	Command & Conquer: Red Alert (Virgin)

NINTENDO 64

1	Super Mario 64 (Nintendo)
2	Super Wave Race 64 (Nintendo)
3	Star Wars: Shadows Of The Empire (LucasArts/Nintendo)
4	FIFA Soccer 64 (Electronic Arts)
5	Turok: Dinosaur Hunter (Acclaim)

MUSIC

1	Men In Black (Will Smith)
2	I'll Be Missing You (Puff Daddy)
3	Freed From Desire (Gala)
4	Tubthumping (Chumbawamba)
5	Everybody (Backstreet's Back) – (Backstreet Boys)

THIS MONTH IN...

OFFICIAL SEGA SATURN MAGAZINE

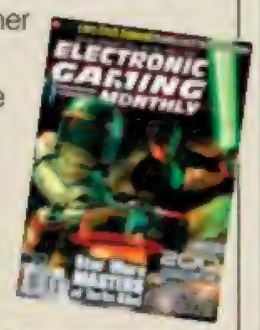
The magazine took a look at Gremlin Interactive and its scheduled releases which consisted solely of sports titles. Gremlin's *Actua* series continued with *Actua Soccer 2*, *Actua Tennis*, *Actua Golf 2* and *Actua Ice Hockey*. Looks like Gremlin was developing using the EA playbook...

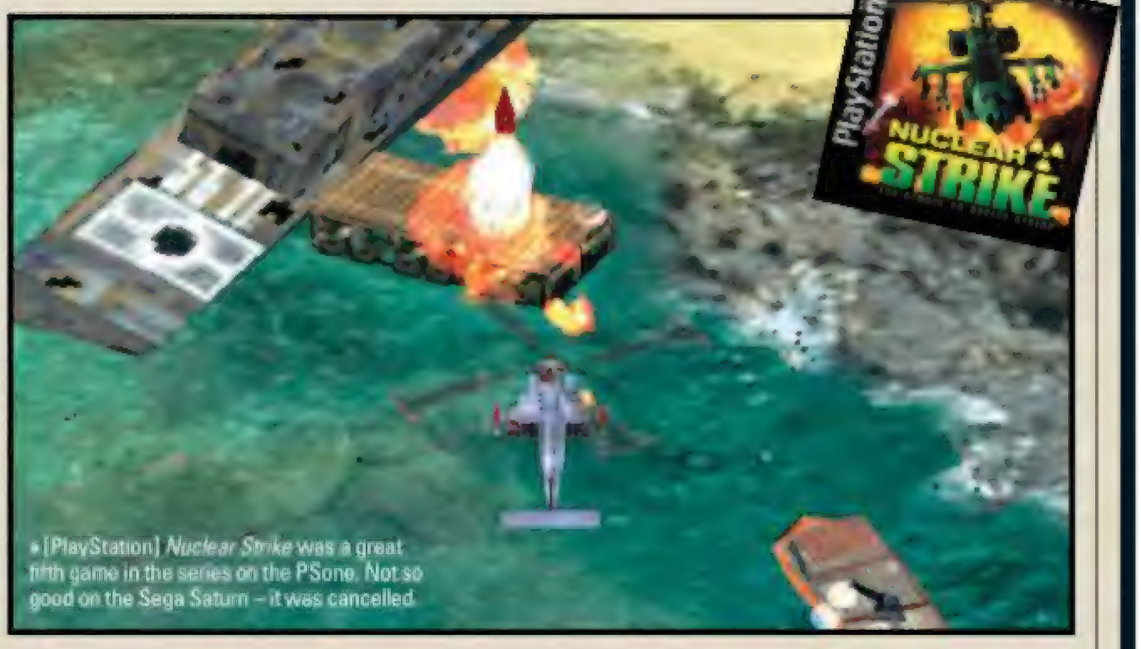
COMPUTER & VIDEOGAMES

C&VG highlighted the forthcoming game of the movie, *The Lost World*, the sequel to *Jurassic Park*. The previews for PlayStation and Saturn consoles looked the part graphically but would the gameplay be up to scratch? *C&VG* said yes while reality would later correct that opinion with a big wet raspberry.

ELECTRONIC GAMES MONTHLY

EGM broke the news that Square would not be translating its *Tobal 2* for a US/EU PlayStation release. Although Square was busy on other projects, conclusions were drawn that Square was having second thoughts of releasing it after the poor commercial showing of the original game.





▸ [PlayStation] *Nuclear Strike* was a great fifth game in the series on the PSone. Not so good on the Sega Saturn – it was cancelled.

the medieval fantasy-themed *Hexen II* by id Software for PC. Similar in style and format to the original *Hexen* game, the sequel added a further class of character making four in total, all with varying skills and abilities. The addition of role-playing elements to the proceedings added depth to the game while breaking the game up nicely with challenging logic tests to stretch your grey matter as well as your biceps.

Hexen II used the *Quake* engine but with those additional tweaks and some marvellously designed layouts combined with the beautiful graphics and textures, *Hexen II* would prove to be a great sequel.

Fighting Fantasy game books hit the nostalgia sweet spot for many a retro gamer. There was wonderful news that one of the earliest titles, *Deathtrap Dungeon*, was under development for the PlayStation and PC by Asylum Studios and to be published by Eidos.

First indications from Asylum were that the game would closely follow the book in a third-person action adventure format. The 3D environment would be laden with enemies, traps and puzzles to solve in which you cast magic spells and utilise short and long-range weaponry to aid you in your quest. Potions could be found to increase health and keys had to be located to open the seemingly endless amount of locked doors.

Regrettably the graphics were mediocre and the animation lacked definition. The gameplay was also flawed, rife with monotony and frustration – helped in no small part by sluggish controls. If you really want to play *Deathtrap Dungeon*, play the book.

There were more updates from Eidos on another third-person arcade adventure that was nearing completion. *Tomb Raider II* featuring Lara Croft was progressing well and was already garnering a huge following thanks to the celebrity enjoyed by the pixelated beauty of Miss Croft.

With plans for a movie in the pipeline and the Croft face appearing on magazines and TV advertisements across the globe it wasn't just the soap-dodging, bedroom-dwelling, male teenage populous sitting around all day in their Y-fronts that were perking up and taking notice.

Tomb Raider II for the PC would see refinements to both game and character. The game would be similar to the original with levels requiring completion by solving puzzles and tasks but on a grander scale. The graphics were enhanced, an improved lighting system employed, the levels enlarged and there were more varieties of weaponry.

Lara Croft had also been given the once over. She had gained a range of new garments including a figure-hugging wetsuit and a new set of curves to fill said wetsuit. Thankfully the hype surrounding the game wasn't guff and it sold very well.

Another nailed-on classic due for release imminently was LucasArts' third game in the *Monkey Island* series, *The Curse Of Monkey Island* for PC. The graphical adventure followed the continuing adventure of Guybrush Threepwood who had to lift a curse put upon his love interest Elaine Marley.

The Curse Of Monkey Island was the last in the series to use the SCUMM engine (Script Creation Utility for Maniac Mansion), which was essentially a cross between a programming language and a software framework, and quickly became a critical and commercial success.

Electronic Arts had good news and bad news. The good news was that *Nuclear Strike*, the fifth game in its *Strike* series, would be released this month on the PlayStation. It would once again follow a similar formula to previous outings with a helicopter, plenty of shooting and a good dose of strategy. The bad news was that the planned Sega Saturn conversion had been cancelled.

Psygnosis added to the Saturn's misery when it announced its hit game *Formula 1* was also to be cancelled. The PlayStation and PC versions enjoyed great success yet, inexplicably, the project was moth-balled leaving Saturn owners in the pits... ✱

▸ [PC] *The Curse Of Monkey Island* was the third in the series and the last to use the SCUMM engine.

▸ [PC] The eagerly awaited *Tomb Raider* sequel arrives on PC.

AUGUST WORLD NEWS

4 August saw the death of Jeanne Louise Calment who held the world record for the longest recorded and verified lifespan of any person. She died aged 122 years and 164 days old. She lived in Arles, France her entire life and, unsurprisingly, died of natural causes.

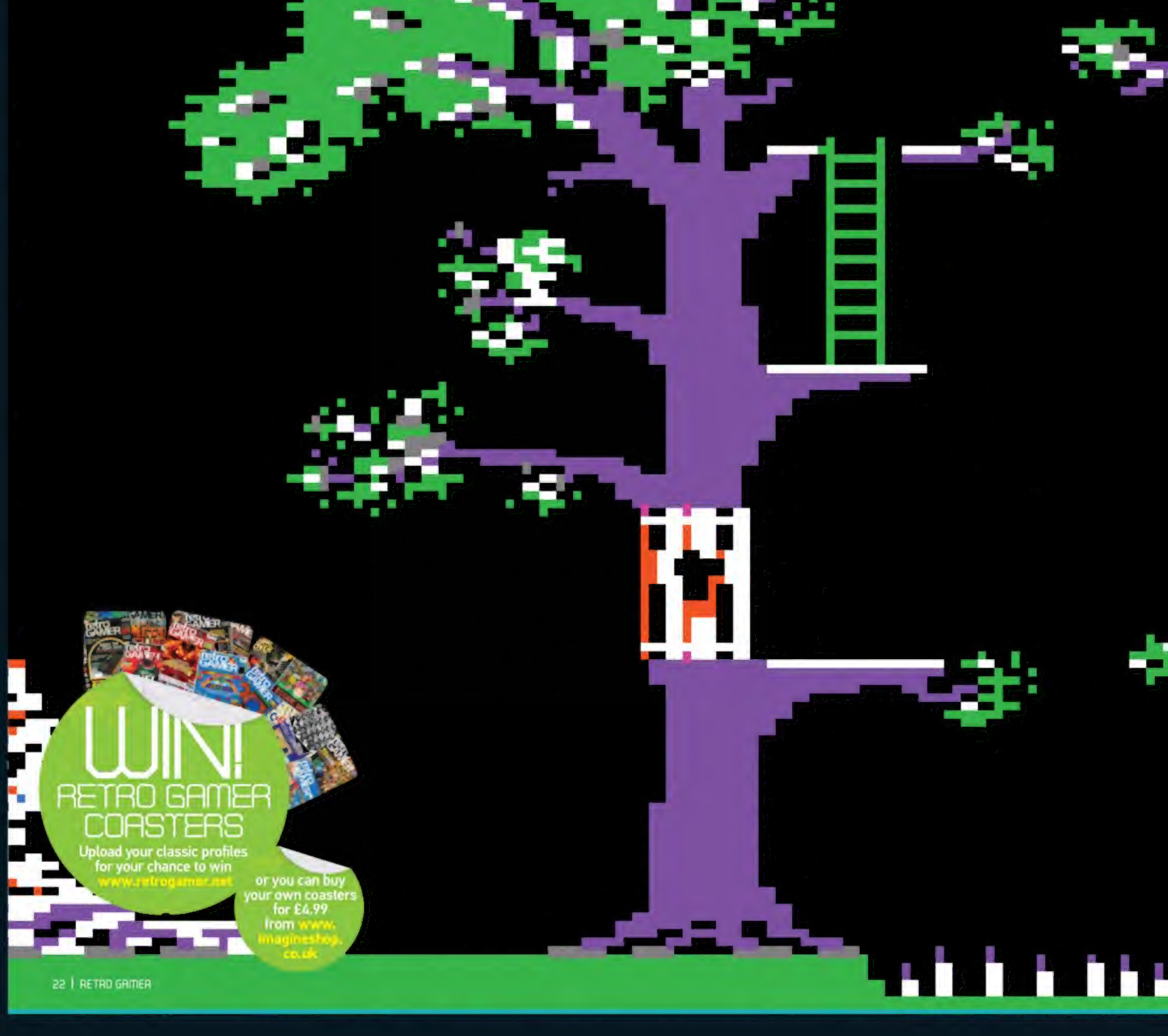
13 August saw the debut on American television of the adult animated comedy show *South Park*. Created by Trey Parker and Matt Stone, *South Park* became a hit thanks to its surreal humour, satirical outlook on a variety of subject matters and its unsavoury language.

31 August saw another death in France. Diana, Princess of Wales, died in a Paris road tunnel after her Mercedes car crashed at high speed into a supporting pillar. They were reportedly speeding away from paparazzi who were chasing the car. This was confirmed but not given as the reason for the car losing control and crashing.

The chaffeur, Henri Paul, and Diana's boyfriend Dodi Fayed both died at the scene while their bodyguard Trevor Rees-Jones suffered multiple injuries but survived the crash. Diana was still alive but was in a terrible state. She was transferred to the Pitié-Salpêtrière hospital shortly afterwards but died two hours later at 4am.

The blame for the crash was placed on Paul who had been intoxicated. It was also reported that all four passengers were not wearing seatbelts.

retro GAMER.net READER'S REVIVAL



WIN! RETRO GAMER COASTERS

Upload your classic profiles for your chance to win www.retrogamer.net

or you can buy your own coasters for £4.99 from www.imagineshop.co.uk

Conan: Hall Of Volta

THE DESTROYER OF KEYBOARDS

#79

» SE SOFTWARE » APPLE II » 1984

Admittedly, taking my rose-coloured shades off for just one moment, there weren't too many games over which the Apple II could claim superiority over its 8-bit counterparts – and I'm an unabashed fanboy. In the case of *Conan: Hall Of Volta* though, I shall thrust my sword down into the ground (narrowly missing my feet) and fight to the death anyone proclaiming otherwise with this classic platformer, because in my opinion it usurps the position of King Of Conan Versions, easily besting all other upstarts (although if memory serves me correctly I've actually only ever seen the C64 conversion).

You knew you were in for something special after seeing the brilliantly animated horse-riding Conan on the title screen (note: missing in the C64 version!) and seeing the sword being thrust into the letters 'Conan': this alone was something else on the Apple (and took up a whole side of a disk, as you had to flip straight afterwards).

The aim of the game according to the handy introduction screen is to: "Destroy Volta. Beware of his minions, collect keys and gems to your advantage", and you're off on your own with just your trusty boomerang-sword and a pair of leopard-hide underpants (with matching boots). With the ability to do an infinite amount of somersaults Conan most certainly needs every bit of his dexterity to leap from treetops, climb and descend huge ladders, traverse molten caverns and tackle all sorts of crawling and flying things lovingly sent forth by Volta himself over seven challenging and extremely well-designed levels – difficult, but absorbing enough to keep the younger version of me occupied for large chunks of the school holidays.

So I think I shall try just one more time to complete what I never could some decades before. Although if my reflexes have dimmed to any degree, it may indeed be some weeks before I leave my study and see sunlight once again.

ROBERT ROEMER

IT'S A KNOCK-OUT

THE HISTORY OF PUNCH-OUT!!

Punch-Out!! has everything that people love from the boxing ring – hard-hitting fights, larger than life characters and an underdog to cheer. Nick Thorpe tackles three decades of Nintendo's distinctive style of boxing action...

OUT!!

Boxing has a funny history when it comes to videogames. While the sport formed the basis of the very first one-on-one fighting games such as Sega's Seventies arcade title *Heavyweight Champ*, it has rarely made for games which are particularly popular in the sports or fighting genres, even when legendary heavyweights are plying their trade. While it could be argued that boxing games struggle because they can't provide the varied fighters and styles of the more outlandish fighting games, the *Punch-Out!!* series is a solid counter to that argument.

Punch-Out!! was born not from a specific desire within Nintendo to make a boxing game, but from a combination of external factors. When *Punch-Out!!* was being developed in 1983, laserdisc games were making their breakthrough in arcades, headed by *Dragon's Lair*. Having experienced issues with its video-based electromechanical game *EVR Race* in the mid-Seventies, Nintendo was wary of taking on the heavy maintenance burden that was associated with video hardware, but recognised a need to deliver impressive visuals to compete with the emerging products. The company began to investigate new sprite handling technology as a result and it was in luck – scaling and rotation of sprites had become possible. However, given the limitations of the hardware, only a single sprite could be manipulated, and it couldn't have both scaling and rotation applied at the same time. ▶

Punch-Out!!

▶ The other factor was a stock problem. The massive success of *Donkey Kong* had caused Nintendo to buy monitors at the same rate it was selling the game, but as sales died down the company was left with a large amount of excess monitors. To clear the stock, the decision was made to create an arcade game that utilised two monitors. This presented a problem for Nintendo – what kind of game could use only a single scaling object? After an attempt to create a racing game on side-by-side monitors failed, inspiration struck. A boxer only ever has one opponent, making the sport perfect fodder for the developing hardware. A second screen was hardly necessary, but could be employed to emphasise the pageantry surrounding the sport – the lights, the big electronic displays, banners and more. Plus, it would keep the main screen free of clutter, allowing the visuals to achieve the desired impact.

Much of the unique feel of *Punch-Out!!* can be attributed to two key members of staff – game designer Genyo Takeda and artist Shigeru Miyamoto. Takeda's vision was that the game should be heavily targeted towards the American market – not only was the USA the centre of the boxing world, its arcade scene was huge. The first idea that Takeda had to differentiate the game was a realistic control scheme using boxing gloves. This ultimately fell by the wayside, with Miyamoto stating a preference for traditional joystick controls when asked – an ironic turn of events, given his later belief in the intuitive nature of motion control. The final game shipped with a joystick and three buttons. More successful was Takeda's desire to create memorable characters, as he came up with English names that conveyed the characteristics of each fighter – Glass Joe had a weak jaw while Bald Bull's signature attack saw him charge towards the player. Even the character voices were provided by members of staff at Nintendo of America, too.

» [Arcade] Being so large, characters were able to show more distinct facial expressions that brought the battles to life.

"It made it all the more satisfying when you eventually knock out a huge opponent"

Makoto Wada

The original designs for the characters themselves were the work of Miyamoto, who was still in Nintendo's art-focused Planning Department. At the time, the company was experimenting with technology that would allow it to create sprites from scanned images, and Miyamoto lacked confidence in his ability to deliver the quality of art required for the game. As a result, Nintendo sought the services of noted animation company Studio Junio to produce the individual frames of animation for each boxer. The scanning technology wasn't quite ready though, and Miyamoto and his assistant had to draw giant pixel images on graph paper based on the animation cells provided by Studio Junio. He also managed to sneak Mario and Donkey Kong into the crowd, which would sow the seeds for an interesting secret in a later game. *Punch-Out!!* didn't have the incredible visuals of the laserdisc games it hoped to compete with – it never could have done – but it certainly made a big impression on its own terms.

***Punch-Out!!* also delivered on the gameplay front. Each fight consisted of a single three-minute round in which you had to knock out your opponent. This required carefully timing** dodges left and right to avoid your opponent's punch – you could see when they were about to strike, as the whites of their eyes flashed yellow – then punishing them while their guard was down. Landing a series of successful blows filled up the KO bar, allowing you to unleash a much more powerful uppercut. Successfully defeating an opposing fighter would allow you to move on to the next one, with the game looping in a title defence mode after you defeat the sixth, the world champion Mr Sandman.

Aided by a trade show debut that included a presentation by reigning heavyweight champion Larry Holmes, *Punch-Out!!* was a major success. Demand for a sequel came swiftly, and *Super Punch-Out!!* was put into production. In many respects, Nintendo chose not to fix the game as it clearly wasn't broken. Only one major change was made to the gameplay – the inclusion of the ability to duck by pulling the joystick

» [Arcade] Dragon Chan's kicks are incredibly damaging and must be avoided with the new duck move.

outwards, as if you were trying to remove it from the machine. With the gameplay sorted out, the other major factor in the success of *Punch-Out!!* could be addressed – characters.

Super Punch-Out!! included five fighters rather than the six of the original, but these guys were rather different and more challenging. The characters in *Punch-Out!!* were standard boxers – they wore trunks and threw pretty standard punches, and were all of a similar build. From the moment you first took to the ring in *Super Punch-Out!!*, Bear Hugger proved that this was no longer the case. The dungaree-clad Canadian fighter was gargantuan, absorbed body blows without issue and attacked with a double-handed chop unlike anything actually seen in a boxing ring. Other fighters followed suit – Dragon Chan was modelled on Bruce Lee and actually leapt onto the ropes to deliver a flying kick to the player, for example. The approach worked well, further establishing the fact that characters were an important part of the series.

Aided by the art scanning tool that had been intended for the original game, *Super Punch-Out!!* was produced in a matter of months and earned similar praise to its predecessor upon its release late in 1984. *Arm Wrestling*, a spin-off product whose main tie to the *Punch-Out!!* series was an appearance by Bald Bull as the mysterious Mask X, followed in 1985. It never achieved the same success as the *Punch-Out!!* games and would be Nintendo's last original arcade game, as it transitioned to focus wholly on the home market. With the Famicom firmly established in Japan and the NES making waves in the USA, the decision was made in 1986 to give *Punch-Out!!* a home version.

From the start, it became clear that it couldn't be a straight conversion. "With the arcade version we had these amazing battles with real impact, where two huge characters would fight each other. It was a challenge trying to re-create this on the NES," explains Makoto Wada, who had only recently joined Nintendo as a character designer during the production of *Punch-Out!!* for the NES. "Instead of trying to draw both the player and opponent characters so large, we just focused on showing off the size of the opponent. This lead to the player-character becoming really small, which actually made it all the more satisfying when you eventually KO this huge opponent. Incidentally this is also how the player-character got his name, *Little* Mac."

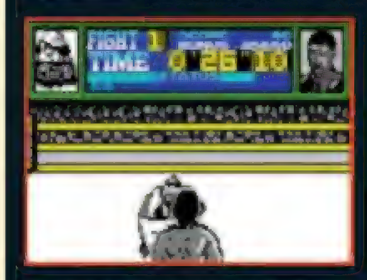
It wasn't just the visuals that changed – a number of changes were made to gameplay, in order to add depth for the home market. Matches moved to a three-round structure and the KO bar was removed, with uppercuts now earned by countering opponents' punches with blows ▶

» [NES] Makoto Wada's favourite character, King Hippo, has a very noticeable vulnerability...

» [NES] The training scene with Doc Louis has become an iconic image of the *Punch-Out!!* series.

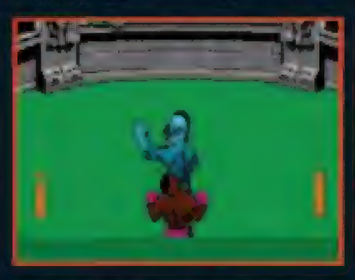
THE CONTENDERS

Punch-Out!! has inspired a number of imitators over the years – we sort the champs from the chumps



FRANK BRUNO'S BOXING 1985

■ Take three of the fighters from *Super Punch-Out!!*, add a popular British heavyweight and you have an 8-bit micro success. What's not clear is if the pseudo-conversion actually has anything to do with Nintendo – despite the use of its characters, it isn't credited in the game or on the packaging...

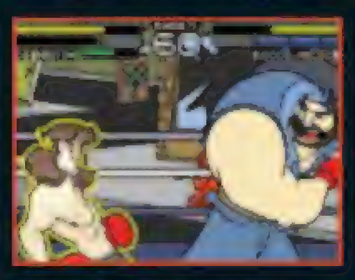


POWER PUNCH II 1992

■ Originally titled *Mike Tyson's Intergalactic Power Punch*, American Softworks needed to rebrand the game when Tyson was convicted of rape. Claims that this game was originally intended as an official *Punch-Out!!* sequel have never been substantiated, but it's confirmed that the game itself is a dud.

TELEROBOXER 1995

■ This one's an actual Nintendo production, which plays a lot like *Punch-Out!!* but looks more like *Rock 'Em Sock 'Em Robots*. It poses a notably stiff challenge, but is one of the most visually impressive Virtual Boy games, due to its excellent use of sprites to create a potentially headache-inducing 3D effect.



WADE HIXTON'S COUNTER PUNCH 2004

■ This GBA release is a bit of a hidden gem – it borrows its gameplay from the *Punch-Out!!* series and shares a similar emphasis on characters. The handheld's 2D power allows for some gigantic sprites with fantastic animation reminiscent of a Saturday morning cartoon.

MIKE TYSON: MAIN EVENT 2011

■ This iOS game clearly took aim at the *Punch-Out!!* series, even getting the Mike Tyson licence to match. It looked rather like a Flash game and didn't quite have the characters down, but since it was a free-to-play digital release that has been de-listed, you can't play it anymore.

Punch-Out!!

» [SNES] Little Mac's new look didn't last for very long, only appearing in *Super Punch-Out!!* and a single cameo.

▶ of your own. A new mechanic was also introduced in the form of hearts representing Little Mac's fighting spirit. Swinging wildly was discouraged, as each miss or blocked punch would deplete hearts. Reaching zero would cause Little Mac to become tired and unable to punch, requiring him to dodge blows for a brief period.

Alongside returning characters from the arcade games such as Bald Bull and Vodka Drunkenski – now renamed Soda Popinski, in line with Nintendo's family-friendly policies – were a batch of new creations including Von Kaiser and Don Flamenco. "My favourite is King Hippo," Wada tells us. "He seems a little out of place when you look at the game overall, but as this was one of my first jobs I am really emotionally invested in it." To help figure out their patterns, Little Mac gained corner man Doc Louis, who would give hints during the breaks between rounds.

One of the most memorable aspects of the NES game was the inclusion of Mike Tyson, an idea that came from Nintendo of America president Minoru Arakawa, who had been impressed with the fighter's performance after seeing him live. It would prove to be a major marketing coup – Tyson was the undefeated, undisputed heavyweight champion of the world, and the game's October 1987 release coincided with a successful title defence. As well as appearing on the box and in TV adverts for the game, Tyson served as the game's final, most challenging fighter in the Dream Match round. "I will never forget knocking out Mike Tyson in the basement of my childhood home," recalls Mike Inglehart, who worked as a game director on *Punch-Out!!* for the Wii. "It was one of the moments where you scream out and run around the room in celebration, he must have knocked me out well over a hundred times before I helped Little Mac capture the title."

Though Mike Tyson's *Punch-Out!!* was well-received by the public and sold over a million copies, Tyson's personal problems attracted press attention over the following years. He later lost his undisputed heavyweight championship in a major upset to James 'Buster' Douglas in February 1990. Faced with a star it no longer wished to be associated with but a game it still wished to sell, Nintendo released a revised version of the game simply titled *Punch-Out!!* in the summer of 1990. The new version featured a new final opponent in the form of Mr Dream, who was simply Tyson with a redrawn head. Having beaten everyone there was to beat on the NES, Little Mac went on hiatus for a few years.

"We had to make the player-character smaller out of necessity for the NES, but we weren't satisfied with this," explains the producer when asked about the next game. Released for the SNES, *Super Punch-Out!!* was a loose adaptation of its arcade namesake, with the more powerful hardware allowing Wada and his team to sidestep the compromises required on the NES seven years earlier. "With the SNES version we could finally draw the player's character larger as well, so we went back to a larger sized 'Medium Mac' and it started to look a lot more like the arcade version," Wada recalls.

In fact, while the SNES was unable to replicate the scaling of the arcade fighters, it managed to visually exceed the original game in most areas. Sprites were more detailed and colourful, while Little Mac himself was now transparent, negating the need for a wire-frame fighter. That wasn't the only change to Little Mac's design, though – while prototype screenshots and videos show him exhibiting a look similar to his standard appearance, the final game features a full redesign with mousey brown hair.

With the game's perspective shifted back to the arcade style, much of the gameplay also reverted. Gone were the hearts and stars of the NES game, with the KO bar from the arcade making its return. The main mechanical addition over the arcade version was the ability to regain health while an opponent was knocked down by mashing ▶

"I will never forget knocking out Mike Tyson in the basement of my childhood home"

Mike Inglehart

» [SNES] Mid-match trainer comments were a new feature in the SNES game, and occasionally helped to figure out opponents.

BATTLE FOR THE BELT

Eight of gaming's finest boxers have lined up for the chance to claim **Retro Gamer**'s heavyweight championship – who will come out on top?

★ ROUND 1 ★ ROUND 1 ★ ROUND 1 ★ ROUND 1 ★ ROUND 1 ★ ROUND 1 ★ ROUND 1 ★ ROUND 1 ★ ROUND 1 ★ ROUND 1 ★

LITTLE MAC VS TJ COMBO

■ The *Killer Instinct* ring general takes control early, landing a series of devastating lefts and rights in quick succession. However, Little Mac regains his composure, ducks left and lands a devastating counter uppercut, knocking out TJ and causing a nutter with a megaphone to shout "combo breaker!"

WINNER: LITTLE MAC

DUDLEY VS ROGER

■ A man of class and sophistication, Dudley is utterly aghast at what he sees in the ring before him – a boxing kangaroo, of all things? Not over-thinking matters due to being a kangaroo, Roger begins his ridiculous wind-up punch, letting fly just as Dudley steps through the ropes – one-hit KO.

WINNER: ROGER

ROCKY BALBOA VS STEVE FOX

■ In a battle of youth against experience, Steve Fox quickly gains the upper hand. However, just like Apollo Creed he finds that despite his greater skill and punching power, he can't put Rocky down. The two go the distance, but Rocky wins a controversial split decision that has the crowd in uproar.

WINNER: ROCKY BALBOA

MIKE TYSON VS BALROG

■ The tension in the crowd is palpable as these two stare each other down, but what promises to be a titanic clash quickly turns into utter disappointment. After Tyson off-handedly asks Balrog if he used to go by a different name, the *Street Fighter* star flees the ring shouting something about lawyers...

WINNER: MIKE TYSON

★ ROUND 2 ★ ROUND 2 ★ ROUND 2 ★ ROUND 2 ★ ROUND 2 ★ ROUND 2 ★ ROUND 2 ★ ROUND 2 ★ ROUND 2 ★ ROUND 2 ★

LITTLE MAC VS ROGER

■ Roger comes into the match relaxed and with little to fear, since he is a kangaroo. However, Little Mac is no stranger to odd opponents and has years of practice in reading telegraphed punches. As Roger winds up for his devastating punch, Mac ducks and responds with a fierce combo.

WINNER: LITTLE MAC

ROCKY BALBOA VS MIKE TYSON

■ A win just isn't in the script for Rocky tonight – the baddest man on the planet is all over Rocky from the bell, and the match quickly becomes one-sided. There's no Hollywood comeback for Balboa though, as he hits the canvas before the two-minute mark and stays there.

WINNER: MIKE TYSON

★ FINAL ROUND ★ FINAL ROUND ★ FINAL ROUND ★

LITTLE MAC VS MIKE TYSON

■ Tyson lets fly with a vicious flurry to open the bout, but Little Mac's footwork is equal to it. At least, it is initially. You've run the simulation a hundred times over and you know that Little Mac can win, but this isn't that one victory you achieved – this is the 99 times you lost. Tyson characteristically flattens the underdog, becoming **Retro Gamer**'s first world champion in the process.

★ WINNER: MIKE TYSON ★

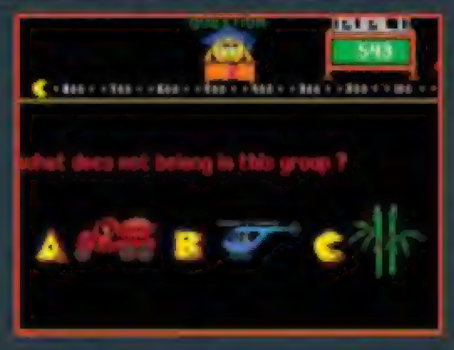
PUNCH-OUT!!

RANK OUTSIDERS

Punch-Out!! spin-off Arm Wrestling isn't the only game to drastically differ from its source material...

PROFESSOR PAC-MAN 1983

This arcade quiz game was the first time Pac-Man had ever ventured out of his traditional maze environment. It quickly became apparent that the audience was not responding to the game at all well. As a result, few cabinets were manufactured and the majority were returned, making this a rare game.

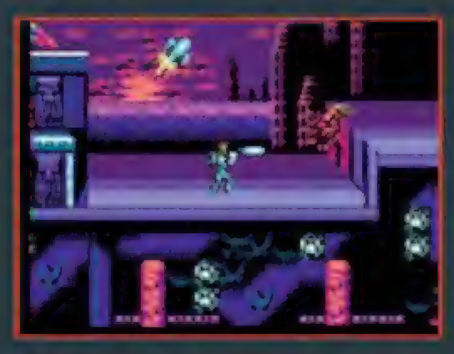


FANTASY ZONE: THE MAZE 1987

It's not entirely clear why Sega decided to make a maze game out of its cutesy shoot-'em-up series, launching it only a couple of months after *Fantasy Zone II: The Tears Of Opa-Opa*. We can only assume it was due to *Opa-Opa*'s popularity in Japan during the mid-Eighties...

STREET FIGHTER 2010 1990

Shortly before it unleashed one of the best sequels ever, Capcom launched this awful run-and-gun platform spin-off of the original fighting game. American localisation changed main character Kevin Straker's name to Ken, further solidifying the connection. Needless to say, everyone at Capcom wants to forget this.



CHICAGO SYNDICATE 1995

At one point, Sega was convinced that its fighting series *Eternal Champions* was going to be the next big thing. It was in fact so convinced that it started to release spin-off games in 1995, the first of which was this Game Gear scrolling beat-'em-up starring professional thief Larcen Tyler.

MR DRILLER 1999

Allegedly developed under the working title of *Dig Dug 3*, *Mr Driller* veered away from the action template of the original arcade classic and became an action-puzzle hybrid. The game retains its retro connection through the plot – protagonist Susumu Hori is the son of *Dig Dug* hero Taizo Hori.

» [Wii] The 3D visuals of the Wii game really allowed the likes of King Hippo to come to life.

▶ buttons. However, as had happened in the NES game, a variety of fighters were added to provide long-term value. Of the game's 16 characters only five originated in the arcade games, with the new creations providing a rather diverse range of styles. Masked Muscle is a Mexican wrestler that spits water in your face and headbutts you, while Mad Clown lobs juggling balls at you.

Super Punch-Out!! received a good critical reception upon its release in 1994. The music was generally felt to be less strong than that of its predecessor, but most reviewers praised the game for its tight control and strong sense of character – indeed, the personality of each fighter was so pronounced that *Super Play* noted "you almost feel guilty pummelling the sagging flesh of the first opponent." It was commonly noted that the game had the gentlest difficulty curve of the *Punch-Out!!* series, which wasn't necessarily a bad thing. But despite another strong showing Little Mac appeared to fade away into retirement following *Super Punch-Out!!*, only briefly emerging for cameo appearances.

As a result, surprise and joy were the main reactions that greeted the announcement of a new *Punch-Out!!* for the Wii. Development was handled by Canada's Next Level Games, which had previously handled the *Super Mario Strikers* series for Nintendo. "It was a huge privilege to be given the keys to such a huge Nintendo franchise so we wanted to make sure that we brought forward the best aspect of the original games," explains Mike. "We spent a lot of time dissecting each of the respective versions and decided that the controls from the NES version were the tightest and made the most sense for a translation, not to mention that all players had to do was turn their Wii remote sideways and you had the NES controller in your hand."

As a result, the game was much closer to the NES version than the other games in the series, returning the stars and hearts that were previously unique to that game. In fact, new additions in gameplay terms were quite light – the implementation of motion controls was inevitable, but the main one was an unexpected multiplayer mode. This split-screen battle saw two Little Macs slug it out until one transforms into the hulking Giga Mac, a fighter closer to the main cast than the familiar plucky underdog.

The decision to go light on new mechanics allowed the Next Level team to focus on character. The new cel-shaded 3D visuals contributed to realising this vision, as did a title defence mode in which fighters addressed their weaknesses in hilarious ways, such as King Hippo protecting his stomach with a manhole cover. Particular effort was put into conveying each character's personality through voice acting, as Mike explains. "We took the text-based chatter that was used in the older versions and gave each character a voice in their native tongue, so Glass Joe fearfully asked for mercy in French while Bald Bull yelled at you in Turkish." Mike himself

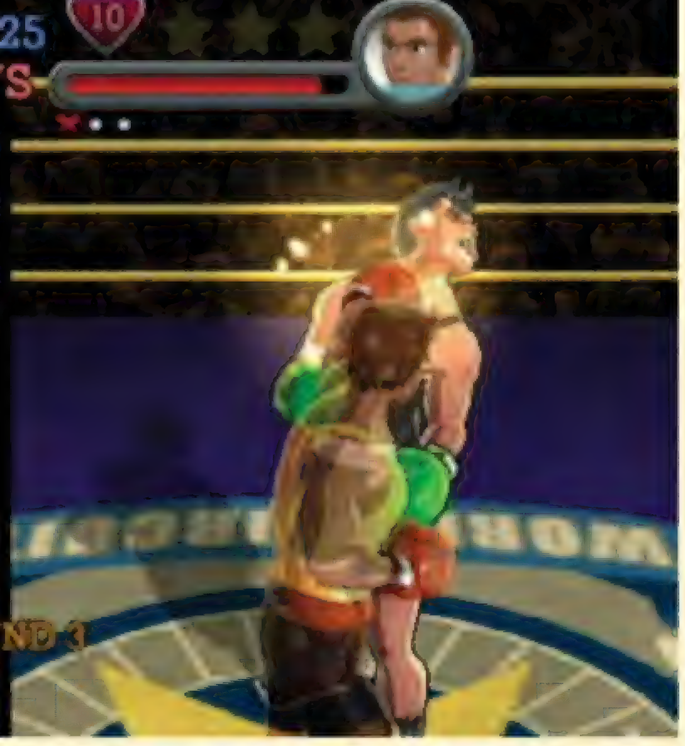
» [Wii] Multiplayer is a split-screen affair for the most part, with each player controlling a Little Mac.

provided voice work, appearing as Super Macho Man.

While the game only added one new cast member in the form of Disco Kid, long-term spectator Donkey Kong finally emerged from the crowd as a surprise challenger. "Nintendo loves secrets in games and the idea came from them during development," Mike reveals. "Whenever I play Nintendo games I expect surprises and this feature design met that criteria. I don't think a single player expected it!"

Next Level's decision to stick to the popular formula proved to be a wise one, as *Punch-Out!!* received excellent reviews upon its release in May 2009. The familiarity and authenticity of the experience was appreciated by critics, with the main criticism being a lack of new additions to the cast. Later that year, Club Nintendo members in the USA and Canada would have the opportunity to download *Doc Louis's Punch-Out!!*, a limited edition version of the game which allowed players to spar with Little Mac's trainer for the first time.

While *Punch-Out!!* hasn't seen a new release since then, the series hasn't been forgotten – Little Mac's appearance in the new *Super Smash Bros* game is sufficient proof of that. It doesn't hurt that every release has been good, with all of them having been developed by teams that recognise the qualities that drew people to the original game. With an array of beloved characters to draw upon and game mechanics that still pack a punch decades down the line, we'd be in the front row if ever Nintendo decides that *Punch-Out!!* needs a comeback bout. ✱



SMASHING CAMEOS

The other appearances of Nintendo's classic boxer and why he's perfect for the latest Super Smash Bros game

Little Mac hasn't traditionally been one of Nintendo's biggest stars, but over the last decade he's been more active in his pursuit of wider gaming stardom. While *Punch-Out!!* has frequently appeared in mini-game compilations such as the *Wario Ware* and *NES Remix* series, Little Mac himself is best known for three specific cameo appearances.

The first of these was in EA's *Fight Night Round 2*, where he appeared as a GameCube-exclusive hidden character squaring up against the likes of Muhammad Ali and Evander Holyfield. He's in SNES *Super Punch-Out!!* form here as it was his last videogame appearance, and accompanies the game itself as a bonus feature. It's a nice bit of bonus content, but Little Mac does jar with his realistic opponents somewhat. A few years later, he was back in his NES form in the Japan-only Wii game *Captain Rainbow*. In that game the titular protagonist, a long-forgotten TV superhero, needed to help a group of forgotten Nintendo stars achieve their dreams. Having become rather pudgy to say the least, Little Mac needed to lose weight to get back to boxing.

However, it's Little Mac's latest cameo that is his most exciting, as he has joined the roster of *Super Smash Bros* for Wii U and 3DS. Fans of the series will know that *Super Smash Bros* doesn't go light on the nostalgic inclusions, and Little Mac benefits greatly from this. As well as his regular ring gear, we've seen him in a green wire-frame form that recalls the original *Punch-Out!!* arcade games. Better yet, fans of the Wii game will be pleased to know that Giga Mac has made it into the game, with the transformation taking place as part of Little Mac's Final Smash attack.

We're not sure how it's taken so long to include Little Mac, as his status as a boxer makes him one of the most obvious choices for Nintendo's popular multiplayer party fighter, but we're glad that he's finally in. It'll certainly be interesting to see how he squares up against the roster, which includes Nintendo stars Mario, Link and Pikachu as well as guest fighters such as Sonic, Pac-Man and Mega Man. Thankfully we won't have to wait too long to find out, as the 3DS version is arriving in October with the Wii U version coming shortly afterwards.

Special thanks to Jeff "Ippon" Lawson at Ippon Gym, Bournemouth for his help with the photography in this feature
www.ipponfitness.com

BIO

When *Road Rash* hit the market in the early Nineties it was a perfect fit for the rebellious attitude that surrounded the Mega Drive, filled with illegal high-speed racing that saw players evading cops and punching other racers off their bikes. But it wasn't always a motorbike game – while San Francisco sport bike culture and the landmark motorbike scenes in *Akira* were influences, the technical need to draw smaller sprites was the major factor in choosing two-wheeled vehicles. Sales success saw the series continue through the Nineties, with three Mega Drive sequels and versions on a variety of other formats.

CLASSIC MOMENTS

Road Rash

» **PLATFORM:** MEGA DRIVE » **DEVELOPER:** ELECTRONIC ARTS » **RELEASED:** 1991

Things are never easy for you in *Road Rash*. You've fallen to club shots and had your share of scrapes with law enforcement but you always come back stronger, determined to bust some heads and bring home the cash. But no matter how many wins you accumulate, no matter how much respect you earn, you start at the rear of the pack. That's what raises your temper, more than any of the other racers' taunts.

And then there's Broomhelga – the permanent backmarker, destined never to win a race. You know what you're going to do, because you do it every time. It's ritualistic at this point. It's not about winning, because your real competition is further up the pack. It's a statement of intent, getting your knuckles sore for the ride ahead and asserting your dominance early on. As the riders set out, you shift over to the left and deliver an almighty smack to the side of the head. You've sent your first opponent tumbling onto the asphalt – now the race has *really* begun. ✱

MORE CLASSIC ROAD RASH MOMENTS

Going out clubbing

As much as your fists and feet are great tools for imposing your will upon opposing racers, they pale in comparison to actually getting your hands on a proper bit of weaponry. Stealing a club from a foe will give you all the clout you'll ever need, allowing you to easily bully your way to the front of the pack by punishing the other racers.

Big air

The Californian landscapes of *Road Rash* are characterised by their rolling hills, regular intersections and sparse vegetation. However, every so often you'll come across a hill so steep and sudden that you'll have no option but to take it at full speed – and when you do, you'll be rewarded with a huge leap off the ground.

See ya, pal!

Any illegal street race would be incomplete without some loser cop trying to spoil the fun, and *Road Rash* doesn't skimp on them. Playing to the American stereotype of Irish cops with names like O'Rourke and O'Leary, these guys will try to prematurely end your race by arresting and fining you. As a result, speeding past them always feels fantastic.

The Best Bike

Sure, there's a lot to be said for racing skill and scrapping your way to the head of the pack, but sometimes you just need raw power. When you finally gather the $25,000 needed to purchase the Diablo 1000, that power is yours. Combining excellent handling with incredible speed, this dream machine makes winning races an almost trivial task.

FINDERS

Finders Keepers was the first in the Magic Knight series and proved to be a significant title for programmer David Jones and publisher Mastertronic. Martyn Carroll reveals the full story

Sometimes it's not possible to determine the true value of something from looks alone. Magic Knight would vouch for that. In his first adventure, *Finders Keepers*, he's spirited away to a very peculiar castle and commanded to collect up as much treasure as possible. The thing is: some seemingly insignificant items like a tube of glue are actually worth a great deal. Furthermore, it's possible to combine low value items like a bar of lead and the Philosopher's Stone and, with a sprinkle of magic, create solid gold.

The game itself is a bit like that. When it debuted on the ZX Spectrum in January 1985 it certainly didn't shine on the shop shelves. It was published by Mastertronic, the budget label not renowned for the quality of its titles, and featured crude cartoon cover-art. But *Finders Keepers* turned out to be a real surprise, a £2 budget gem that you'd happily pay three or four times that amount for. It proved to be an important release for Mastertronic, attracting great reviews (for a change) and selling by the bucket load – on the Spectrum alone it sold more than 117,000 copies. It was later ported to other 8-bit computers and sales topped 330,000 across all versions, making it Mastertronic's second best-selling original game behind *BMX Racers*.

Finders Keepers was coded by David Jones and featured graphics by Ray Owen. It was only David's second game: his first was *Bonkers*, a *Frogger* clone for the Spectrum published by Procom, a small firm formed by Ray's father Albert Owen. Albert had asked at his local Tandy store for programmers and word reached David who was a regular customer. David had taught himself programming on a Tandy TRS-80, learning assembly language as a hobby, and this stood him in good stead for when the Spectrum made its appearance. "The TRS-80 cost me more than £700, which was a fair bit of cash back in 1982," he says. "So when a friend showed me his new 16Kb Spectrum costing £125 I was rather impressed. I soon spotted that the Spectrum had a similar memory layout to the TRS-80 so I knew I could do something with it if I could work out how to develop for it. Fortunately,

» [ZX Spectrum] In order to succeed you need to barter with the castle's friendly traders.

» [ZX Spectrum] The maze exits were always a welcome sight.

THE MAKING OF: FINDERS KEEPERS

FINDERS KEEPERS

» [ZX Spectrum] Magic Knight's odd jumping style can often make it tricky to progress.

» [ZX Spectrum] Some very strange rooms lie deep within the castle.

"I wanted to use assembly language to do pretty things on-screen"

David Jones on why he never wrote a text adventure

Albert had previously made contact with John Campbell of Campbell Systems and John supplied us with a handy interface that connected a TRS-80 to a Spectrum. This was all I needed to develop games."

The inspiration for *Finders Keepers* came from David's fondness for text adventures. But he wasn't about to contribute another volume to the vast library of interactive fiction that already existed. "Text adventures were fun and there were a lot of good puzzles you could put together," he says, "but they were on their way out. Most players wanted graphics. Plus, it didn't require assembly language to write a text adventure and I wanted to use assembly language to do pretty things on-screen."

He was also inspired by the work of fellow Tandy fan Matthew Smith, citing both *Manic Miner* and *Jet Set Willy* as clear influences. Accordingly, the game evolved as a colourful platformer with underlying adventure elements. There were mazes too. "The maze sections were there for a few good reasons," he says. "First, I wanted to add something to *Finders Keepers* so that people wouldn't say 'it's a *Jet Set Willy* clone'. I expect some people probably thought that anyway, but more would have if there had been no maze sections. I also liked the idea of the player getting a surprise when they found the first maze, and on top of that, mazes are a classic adventure element."

The idea for the Magic Knight character came from a drawing which Albert found in an old art book. Ray would recreate the drawing for the loading screen as well as designing the mini, playable version and all of the castle's odd inhabitants. "The graphics, such as the loading screen and animated characters, were created pixel by pixel on the Spectrum using the cursor keys," says Ray. "This, as you can appreciate, took a while to do. I was based at home and Dave would call me with an idea for the animated graphics, including the maximum and minimum pixel size and the number of animated frames. I can remember drawing the basic shape on the television screen using a semi-permanent maker, then all the detail would be added using Dave's Dynamic Graphics drawing tool. The graphics would be saved to tape which I'd then take over to Dave's place and he'd embed them into the machine code. It didn't always go

CONVERSION CAPERS

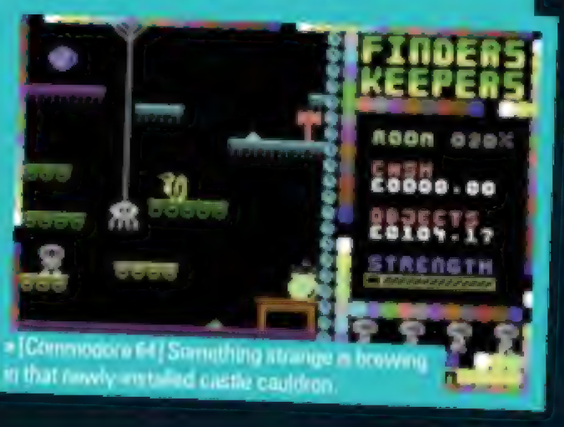
Exploring Magic Knight's adventures on other machines

Finders Keepers was ported to four different platforms by various parties. The Amstrad CPC and MSX versions both feature in-game music but are otherwise very similar to the Spectrum original, which is unsurprising as David Jones provided coder Ed Hickman with the full Spectrum source code. More noticeable differences can be seen in the Commodore versions.

On the Commodore 16, Adrian Sheppard had the job of squeezing the game into 16Kb of memory and as such some elements are missing. There are four less rooms, far fewer items and just the one maze (with no roaming nasties). Otherwise it's close to the original and like the Z80 versions, features just one solution in which you use gunpowder to blow up The Big Puss Without Boots that's guarding the castle exit.

The Commodore 64 release features the most differences. It's not known who coded this version but musician David Dunn was called on to compose an in-game tune. Visually the graphics have been converted from the Spectrum but there are some tweaks (note the jazzing up of the two mazes). The key difference is the way you complete the game, as there are two possible solutions. The first is familiar and involves shifting Puss from the exit, only this is done using the large hairy dog – a red herring on the Spectrum – rather than the gunpowder (you can still create gunpowder and ignite it if you want to see a funny 'game over' screen). For the second solution you must find a birthday gift and card for the princess. To concoct the gift you have to drop various items into the cauldron that appears in the Crazy Wizard's Store Room.

If you're curious about the extended C64 version then be sure to seek out Vinny Mainolfi's 'crazy hack' version (available from www.hackersoft.co.uk).



» [Commodore 64] Something strange is brewing in that newly-installed castle cauldron.

» [ZX Spectrum] A pixel-perfect leap is required to reach the upper maze entrance.

» [ZX Spectrum] The mazes were large and easy to get lost in – or chomped.

» [ZX Spectrum] *Spellbound* introduced the innovative 'Windimation' menu system.

» David dressed up as a knight to promote the release of *Spellbound*

"It's a thank you to those who still remember it fondly after 30 years"

David Jones on his enhanced version of Finders Keepers

IN THE KNOW

» **PUBLISHER:** MASTERTRONIC
» **DEVELOPER:** DAVID JONES
» **RELEASED:** 1985
» **SYSTEM:** VARIOUS
» **GENRE:** ARCADE ADVENTURE

▶ smoothly – I can remember helping Dave painstakingly go through the code to iron out the bugs."

The game took three months to write and was finished in October 1984. Procom was no longer publishing its own titles so, during development, Albert shopped the untitled game around and it was Mastertronic who snapped it up. The publisher had a hand in the development, coming up with the title and contributing ideas such as assigning items a monetary value to give the game an educational slant. David reveals that these were very much suggestions rather than demands. "I was happy to make the changes because they were mostly good ideas. In retrospect I realise that if I'd refused Mastertronic would have published it anyway as it was way better than most of its previous games even without those changes."

One element that Mastertronic handled itself was the game's cover art. The result, while memorable, didn't do a great job of depicting the game. "We didn't have any say in it," reveals David. "It would have been good to get Ray involved in the cover-art, but at the time I was just pleased to see the game all ready for launch. Plus, Mastertronic had shown that it was capable of selling in reasonable quantity and it was more consistent with the look of the rest of its titles."

Despite the game being finished in October, Mastertronic took the seemingly odd decision of waiting until January 1985 before releasing it. David explains: "This was because Mastertronic was confident it would do well, but at the time it had a poor reputation regarding its product quality. So it held off releasing the game until January so that it would have a whole year of accumulated sales when it came to calculating its chart position. I recall it came fifth in the main sales chart for 1985."

Following fantastic sales on the Spectrum, the game was ported to the Amstrad CPC, MSX, Commodore 16 and Commodore 64. David didn't handle the conversions himself yet he still earned royalties from them. "Mastertronic made it easy because it sourced programmers to do the conversions. In effect, the firm would pay an advance on royalties that would be passed to the programmer doing the conversion and then, once that advance was reached, I'd earn full royalty – 10p per copy – on further sales as if I'd written the conversion in the first place. This meant I'd be able to create more new products without spending my time on conversions."

That new product naturally involved Magic Knight as David forged ahead with the follow-up to *Finders Keepers*. Released in late 1985, *Spellbound* was a more cerebral sequel in which the arcade elements were scaled back. It became one of the first releases on the new MAD (Mastertronic Added Dimension) label that was reserved for the firm's best titles. *Finders Keepers* has raised the quality bar and the MAD range was designed to capitalise on it. Two further sequels followed – *Knight Tyme* (1986) and *Stormbringer* (1987) – and there were plans for a fifth and final game, provisionally for the Atari ST, which sadly never materialised.

But David is not yet done with Magic Knight. He has remained in the industry, working for the likes of Psygnosis, Acclaim and Sumo Digital, and last year announced he would be dusting down the Spectrum and buffing up *Finders Keepers* ahead of the game's 30th anniversary. "*Finders Keepers+* is an enhanced version of the original game and is a thank you to those who still remember it fondly after 30 years," he says. "I want to see how much better I could have made it. I intend on having multiple endings because the actual ending of the original was a bit of a loose end – I have five different endings planned to make up for that. The maze code also looks like it could be simplified and optimised for speed. I've added a few new features already, but I'm

» David Jones, the man behind Magic Knight

» [Commodore 16] Stuck inside the single, lonely maze on the C16 version.

» [Amstrad CPC] A little more colour is splashed around on the Amstrad machine.

TOP TRONICS

Classic titles that could be snapped up for just two English pounds

ACTION BIKER

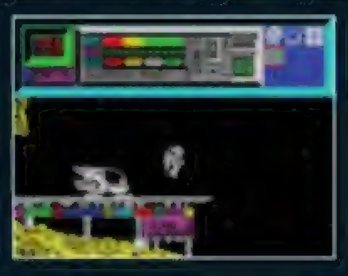
SYSTEM: C64, A8, Spectrum **YEAR:** 1985

■ This one is remembered for 'starring' Clumsy Colin from those Eighties crisps ads. Yet it's clear that Colin was awkwardly attached at the last minute as the game features a distinct lack of melt-in-the-mouth snackage. Instead, you scoot around town on a motorbike, picking up various items within a time limit. The Commodore 64 and Atari 8-bit versions are the best.

TUTTI FRUTTI

SYSTEM: Commodore 16 **YEAR:** 1985

■ Mastertronic had a good hit rate on the Commodore 16, making it difficult to pick out a single title to champion. *Rockman*, *Squirm* and *Big Mac* were all very good, but it's this delightful *Mr Do!* clone from Shaun Southern that deserves special praise. It plays brilliantly, with smooth animation and good use of the Commodore 16's extended colour palette.



UNIVERSAL HERO

SYSTEM: Spectrum, A8 **YEAR:** 1986

■ According to the sleeve, you've only got seven seconds to save the planet. Gasp indeed! Thankfully this clever arcade adventure is not over in a flash as it'll probably take you days or even weeks to reach the end. Visually it looks like a cut-rate version of Odin Computer Graphics' *Yesod* games, yet the puzzles make for a more enjoyable and interesting adventure.

KANE

SYSTEM: Various **YEAR:** 1986

■ Here's a classic case of a game that might have struggled as a full-price release but was perfect as a budget title. Kane is a Wild West romp split into several scenes that involve riding horses and shooting stuff. It's as tough as old cowboy boots but good fun throughout, and the presentation (particularly on the original Commodore 64 version) is top drawer.

KIKSTART II

SYSTEM: Various **YEAR:** 1987

■ Despite the title, this was actually the fourth game in the series following the original, the quirky C16 spin-off and the enhanced C128 version. It proved to be the best of the bunch and is rightly regarded as one the finest budget games ever. Racing against a friend was great fun, but where the game really belied its budget status was with the inclusion of a course design mode.

GAPLUS

SYSTEM: Commodore 64 **YEAR:** 1988

■ Coin-op fans probably weren't expecting or indeed welcoming this Commodore 64 conversion of an overlooked *Galaxian* sequel from four years earlier – yet that made its appearance even sweeter, as it was a brilliant, old-fashioned blaster. Featuring great graphics and frenzied action, *Gaplus* was a superb budget shooter.

making a solid rule for myself that I'm not writing a different game, just the game I might have written if I'd had a phone line to my current self. There will be no code in the final game that I couldn't have written for myself back in 1984."

So what does the David Jones of today think about the code written by the David Jones of 30 years ago? "I'm quite pleased with it actually! It was necessary to be fairly well structured when writing assembly language code or it could get very difficult to work on. There's some self-modifying code in there, but I didn't get carried away with that. I just used it where it might save a few bytes of memory."

David's intention is to launch the game initially via his website www.magicknightgames.co.uk where it'll be made available as a zero-cost download. A limited run of physical tape copies will also be produced. He's aiming to have it ready for January 2015, the 30th anniversary of the game's original release.

» [ZX Spectrum] The game doesn't end when you're out, as you can return to the castle to look for more treasure.

» [ZX Spectrum] Standing between you and freedom is the grumpiest of cats.

While fans will look forward to playing the updated *Finders Keepers*, it's clear that David has enjoyed going back to the days of being the sole programmer and designer on a project. He admits that he kind of made the Magic Knight games up as he went along and believes that helped produce better, more spontaneous results. "Modern games are over designed at the start and then still go through a lot of changes on the way to completion," he says, reflecting. "The advantage I had was that, while I say I made it up as I went along, I always started with a lot of content in mind and then honed it down to all the bits that worked together. There's an element of sculpture about the process. You start off with a block of stone and just chip away the bits you don't want and if you've done it well you will end up with something very pleasing."

DEVELOPER HIGHLIGHTS

SPELLBOUND
SYSTEM: VARIOUS
YEAR: 1985

KNIGHT TYME (PICTURED)
SYSTEM: VARIOUS
YEAR: 1986

OVERBOARD!
SYSTEM: PLAYSTATION, PC
YEAR: 1997

» [Commodore 64] The C64 loading screen was based on the cartoony cover-art.

BAD DUDES VS DRAGONNINJA

The USA is under attack, but not from Russians or space aliens. This is a threat so dastardly it calls for some real American heroes. Mike Bevan finds out whether he's bad enough to step into their shoes

NINJAS. THOUSANDS OF 'EM... DATA EAST'S EIGHTIES ARCADE BEAT-'EM-UP BAD DUDES VS DRAGONNINJA NOT ONLY HAS ONE OF THE CHEESIEST names in videogame history, it also has one of the most famously silly introductions. "Rampant ninja related crimes these days..." chimes the game's attract screen. "White House is not the exception..." Evidently not, as a bunch of nunchuk-wielding stealth assassins have broken into the Oval Office and kidnapped a certain President Ronnie. It's up to square-jawed heroes Blade and Stryker, the 'bad dudes' of the title, to rescue their nation's beloved leader through the power of All-American jingoism and karate.

Bad Dudes is the videogame equivalent of a big, dumb, B-grade Hollywood action flick; the kind with Jean-Claude Van Damme kickboxing his way through hordes of ham-fisted henchman to rescue his missus. It's brash, it's ridiculous, it's completely over-the-top, but it's bloody good fun. "Are you a bad enough dude to rescue Ronnie?" the game asks as you rack up a couple of credits. "Hell yes," you reply, joystick in hand, as scores of blue-suited masked enemies close in on your on-screen avatar, and promptly pummel you into the pavement. Ah well, that's ninjas for you.

The original Japanese arcade release appeared in 1988 and was known simply as *DragonNinja*. It wasn't until the game made it to the West that it inherited its joyfully daft alternative title. Gameplay-wise it's a mish-mash of previous arcade brawlers, notably *Kung-Fu Master* (which was also published in the US by Data East), *Double Dragon* and *Green Beret* (aka *Rush'n Attack*). Viewed from a strict side-on perspective, the seven stages en-route to Ronnie's kidnapper are mostly split into upper and lower levels that your character can leap between. Ninjas come in several forms, denoted by the colour of their outfits, with the odd scantily-clad female one thrown in. Some engage you in hand-to-hand ▶

» [Arcade] The two-player mode features Blade resplendent in white jogging pants and Striker in green.

» [Arcade] The famous truck level has ninjas leaping from passing cars and climbing up to get you.

combat, others come equipped with weapons like katanas, slashing claws or shuriken projectiles. They attack constantly and remorselessly, springing in from the edges of the screen, appearing in puffs of smoke or climbing the sides of obstacles to get at you. One even makes an entrance on the roof of a Porsche 911, which displays a certain amount of style we suppose.

Unfortunately, ninja attire seems to work as a sort of Kryptonite to our bad dudes' health bars, and given the continuous onslaught it's a real battle to keep enemies at bay. Blade and Stryker are pretty handy at unarmed combat, although most of your assaults tend to be the result of simply pummelling the attack button and pointing the joystick at your target. Close-range foes are dispatched with swift high kicks or punches, or reverse kicks to those behind you. Flying kicks are effective against the more agile enemies, while pressing the jump and attack buttons together pulls off an aerial roundhouse move that can clear away several baddies at once. The classic leg-sweep ducking move is handy against shuriken-throwing enemies and attack dogs. Lastly there's a rather pointless upwards punch, and a special charge move, accessed by holding the attack button down for a few seconds, which in practice feels a bit redundant given that most stock ninja foes die in one hit anyway. Still, it does come in handy against a few of the bosses.

Occasionally, some enemies drop weapons that can be picked up and put to use. There's a short-range dagger for slashing enemies, and a rather more useful set of nunchuks, which greatly extends your attack range. Unfortunately you lose any weapons you've acquired when you lose a life, which in *Bad Dudes* is often sooner rather than later. Oddly unbranded red and white soda cans provide a brief respite to your health bar if you nab them among the chaos without getting smacked in the face. Levels are for the most part short and ▶

BILL HARBISON

The graphic designer discusses the Spectrum port he worked on

How did you end up on the *DragonNinja* conversion?
If my memory serves me well, the game was either running late or had it's deadline brought forward. In effect it was decided that having two artists instead of one on the project would speed up the completion of the product. I only worked on the ZX Spectrum version.

What were the challenges of converting *DragonNinja* to 8-bit?
All I had to do was play the arcade machine and make sketches of the animation frames for all the characters. It was quite a tedious process but some of the characters were interesting.

Were you pleased with the way the conversion turned out?
It was an average conversion at best. It could have been improved if more of the screen was used for gameplay and the animations had more frames. I don't really have fond memories of that game. I didn't really enjoy sharing the art duties on the game and I think there was also a clash in art styles between Mark and myself.

How did arcade conversions compare to making original games?
The arcade conversions were usually a lot easier as the whole game was there and all we had to do was make it look the best it possible could on a home computer system. The games were bought on the strength of the graphics so it would be advantageous if the Spectrum version looked as much like the arcade version as possible. You only found out later if gameplay was awful or the game was slow and unplayable.

KUNG FU AND COMMIES

Six alternative arcade brawling blockbusters

KUNG-FU MASTER

The original arcade scrolling beat-'em-up *Kung-Fu Master* was an obvious influence on *DragonNinja*, with its side-on view and acrobatic karate-chopping assailants. The game's meagre storyline involves rescuing your girlfriend from a five-storey pagoda, facing a unique boss to fight on each floor.

TIGER ROAD

Capcom's beat-'em-up took the Oriental mysticism of *Kung-Fu Master* and had a field day with it, resulting in a markedly superior game. It's a beautiful looking title, with your axe-wielding hero battling through palaces, dojos and lush landscapes to rescue some local kids from an evil Dragon God.

GREEN BERET

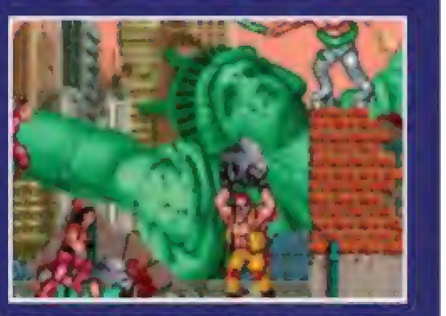
Konami's arcade game puts you in the shoes of a commando running suicidally through Soviet missile bases and aerodromes, armed only with a rusty pocket knife (and the occasional collectable flamethrower). There's no plot to speak of, so we can only presume he just fancied a nice day out.

DOUBLE DRAGON

Another day, another kidnapped girlfriend... *Double Dragon* was the game that first popularised the simultaneous two-player format that cropped up in nearly every arcade brawler that followed it. It also was one of the first to feature weapons that could be collected from downed baddies and used.

SHADOW DANCER

Want more ninjas? Then why not step into the guise of a shadowy assassin battling terrorists in this sequel to the Sega arcade game *Shinobi*. This time round you have a doggy friend to help take down foes, and while you don't get to take a chopper down with throwing stars you do get to fight a train...



TWO CRUDE DUDES

DragonNinja's spiritual sequel features two even badder dudes tasked with cleaning up street gangs in downtown New York. This turns out to involve fighting mutant bosses in front of a fallen Statue of Liberty, picking up cars and chucking them at hapless foes, and punching vending machines.

COIN-OP CONVERSIONS

Your guide to the best and worst ports...

★ Apple II

This version was developed by Data East USA rather than by Ocean, and is rather different to the European conversions. It features particularly small character sprites and doesn't scroll at all – instead you have to defeat several baddies at each single-screen location before moving on.

★ ZX Spectrum

The Spectrum version is about as good as could be expected given the huge gulf between the platform and the arcade hardware. It succeeds at getting lots of sprites on-screen without too much flicker, although the speed of the game is admittedly a little slower than the arcade version.

★ Commodore 64

The C64 port is pretty decent, with nicely defined sprites and well-drawn backgrounds. All of the levels are present, albeit with a few tweaks, such as the train stage scrolling in the opposite direction from the arcade version. There's a nifty Jonathan Dunn soundtrack too.

★ Amstrad CPC

The Amstrad version is notable for its loading screen portrait that bears a resemblance to Bruce Lee in *Enter The Dragon*. It's colourful and fast, and it's a toss-up between this and the C64 version for the best port. 128K owners also get a bit of sampled speech and no multi-load.

★ NES

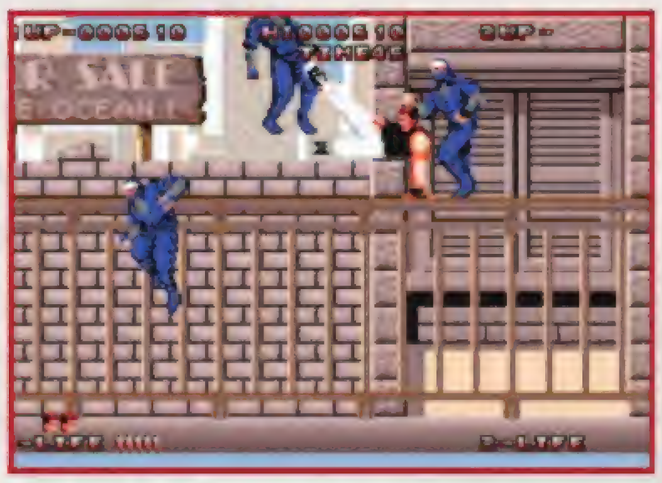
The NES version just about does the arcade game justice, despite the smaller character sprites and lack of a two-player mode. However there are noticeably less enemies than the original so they seem to have been adjusted to take a few more hits before they go down.

★ Amiga

As far as we can tell this is a straight port of the Atari ST version, but while that version was way too slow, this one's too fast – sort of like playing the game in Benny Hill-o-vision™. The awkward up-to-jump control system is also particularly bothersome in this port unfortunately.

★ PC DOS

Arcade conversions on primitive PCs were often fairly shambolic affairs in the Eighties, and unfortunately this is no exception. The action is squashed into a thin window at the top of the screen the ninjas look like they're wearing fat suits and the character animation is atrociously bad.



★ Atari ST

Visually the ST conversion is a lot closer to the arcade game than any of the 8-bit versions, albeit with a reduced colour palette, and it also supports two players. A shame then that it's crippled by being spectacularly sluggish, to the point of being nearly unplayable.

★ Wii

If you want to play the original arcade version of *Bad Dudes Vs DragonNinja* it's available on *Data East Arcade Classics*, released for the Nintendo Wii in 2010. The disc also contains its sequel *Two Crude Dudes* plus a dozen other titles including *Burgertime* and *Caveman Ninja*.

• [Arcade] The annoying attack dogs can only be dispatched with low punches or leg-sweeps.

sweet – you can even run like a maniac to the stage boss if you can make it through his shrouded minions, though this approach might leave you without much health to tackle him. The first boss encounter pits you against fire-breathing Russian strong man Karnov+, moonlighting from the Data East platform game of the same name, complete with his own theme tune. Although he's not too hard to dispatch, later bosses, including a chain-wielding nutter, an armoured giant, and a ninja that splits into dozens of copies of himself are increasingly tricky to survive without taking a truckload of damage.

Graphically, the game was pretty much state-of-the art for 1988, with huge character sprites, impressive backgrounds and decent animation. There are a couple of particularly

• [Arcade] Eighties arcade games like you to fight all their bosses again near the end. ...

BOSS RUSH

How to beat those pesky ninja guardians in the arcade version...

6 Difficulty Level

KARNOV

Having escaped from his own Data East arcade game, Karnov has fallen in with the ninja crowd, and seems intent on burning you to a crisp with his fire-breathing circus act. The Russian strong man telegraphs his flame attacks by puffing up his bloated belly, so make sure to stay clear when you see it.

How to beat him

Flying kicks are effective when Karnov closes in on you, but be sure to avoid or run under his spinning somersault attack if you can. You can also duck his fire-breath and leg-sweep at him if you are feeling brave.

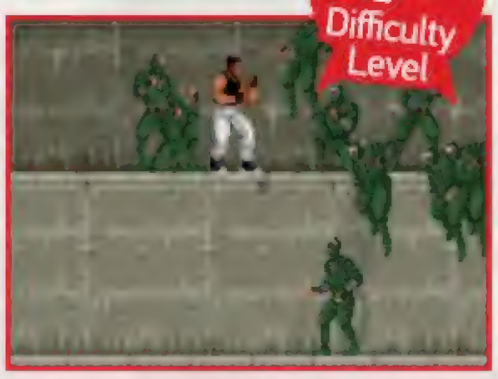
IRON

Iron is a claw-wielding ninja who appears at the end of the truck stage on level two. He's one of the most agile bosses, bouncing around the screen in pursuit of our heroic dudes. He'll do a lot of damage with his Wolverine-like slashers if he gets anywhere near you, but there's a sweet spot you can use...

How to beat him

Jump onto the lorry's bonnet, charge up a power punch, and give him a smack as he bounces in. Then retreat to the far left of the screen and duck behind the cab. Iron will find it hard to get you while you hit him in the face.

5 Difficulty Level


7 Difficulty Level

SHADOW NINJA

This green-suited Ninja boss has a spilt personality... literally. When he glows with a white light he's about to create eight doppelgangers of himself which will chase you around the screen in a similar manner to the standard ninja cronies. Luckily they can be dispatched fairly quickly.

How to beat him

Don't let yourself become surrounded – use the edges of the screen for protection when you see him about to create his clones. Use the power punch to clear them rapidly, and keep attacking until he's done.

ANIMAL

This giant pops up at the end of the forest stage and bears an uncanny resemblance to the wrestler Road Warrior Animal. He's the toughest boss up to this point in the game due to his punch attacks, and a nasty full-body aerial kick that's hard to get away from.

How to beat him

Hit-and-run tactics are best against Animal in order to not take too much damage. Use the top ledge, using flying kicks when you can, not letting him get too close.

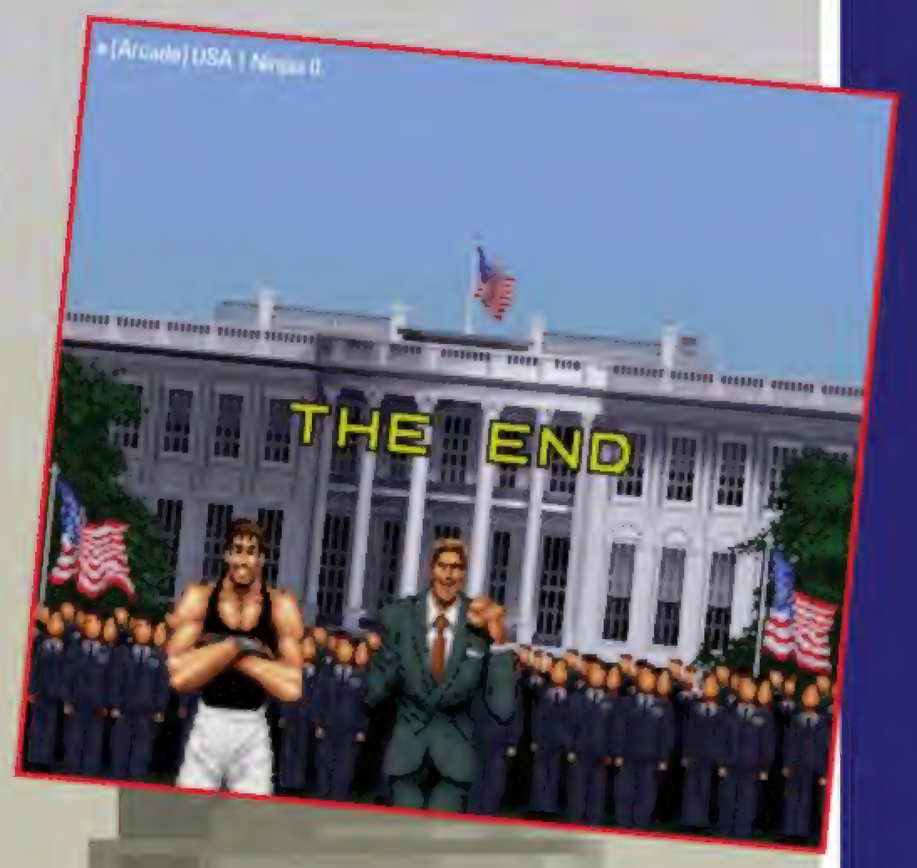
8 Difficulty Level

groovy set-pieces, namely the second level's fight on an enormous 18-wheeler, with ninjas bouncing off passing car bonnets at you, and a stage set on top of a speeding train. The final fight against the arch Dragon Ninja boss on his helicopter is also a memorable moment, after which the freshly rescued Leader of the Free World treats you both to a burger. There are also some rather amusing digitised sound effects including the "Got it!" after grabbing health and time bonus pickups, and the slightly cringe-worthy "I'm Bad!" on defeating a stage boss. We assume Michael Jackson's lawyers never got around to playing this game then...

Ocean Software picked up the rights to convert the game to home computer platforms in Europe, the ports being released in the UK on its Imagine label under its Japanese moniker *DragonNinja*. Console-wise the only contemporary port was the NES version, released in America by Data East USA. Most of the ports were single-player only, apart from the Amiga and Atari ST versions. More recently the arcade version made it onto the Data East Arcade Classics compilation on the Nintendo Wii. Data East also released a spiritual sequel, *Crude Buster* (aka *Two Crude*), in 1991, which was ported to the Sega Mega Drive as the well-received *Two Crude Dudes*. In 2012, a company named Pinstripe Games attempted to fund a true sequel called *Bad Dudes 2* via Kickstarter. Despite the cult appeal of the original, the project ultimately ended in the failure to raise the developer's $80,000 intended goal.

"Graphically, the game was pretty much state-of-the art for 1988, with huge character sprites, impressive backgrounds and decent animation"

Our only regret about *Bad Dudes Vs DragonNinja* was that nobody in the Eighties was canny enough to make a movie about ninjas kidnapping the US president, because that would have been awesome. Probably. Still, the game does have a Hollywood legacy of its own. Ron Howard's *Parenthood*, released the year after the game came out, features a scene in which Steve Martin's character's son plays the game and asks why it's so difficult. "Because they're bad dudes!" Replies Steve. Right on brother, right on. ★



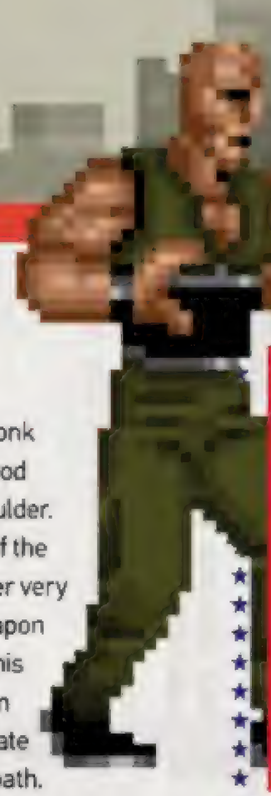
9 Difficulty Level

AKAIKAGE

The masked Akaikage appears at the end of the train level swinging a nasty chain-spear around his head before blasting it straight at you. He also carries a vicious looking scythe with which he can carry out short-range attacks. Because of the limited space he's actually one of the most difficult bosses.

How to beat him

To put it bluntly, you are probably going to get hit or die... Akaikage's chain attack can't be ducked, and you've little room to manoeuvre. Try and get the nunchucks if possible for added attack range.



DEVIL POLE

Devil Pole is a Shaolin monk with a massive wooden rod and a big chip on his shoulder. Encountered at the end of the cavern stage, he's another very fast boss with a long weapon reach, especially during his spinning attack which can mow down any unfortunate dude that strays into its path.

How to beat him

It's hard to outrun Devil Pole's attacks so the best defence is offence here. Flying kicks and lots of leaping about are recommended, as is using the top ledge to charge your power punch when he comes pogo-ing at you.

8 Difficulty Level

10 Difficulty Level

DRAGON NINJA

This is who you came for, the Big Cheese, Numero Uno, the Big Boss... Dragon Ninja turns out to just be some bloke in samurai armour and a frightening blonde wig hanging out of a helicopter, making off with President Ronnie inside. So go get him lads... America salutes you, soldiers!

How to beat him

Avoid the annoying dogs and jump onto the helicopter and try and hit Dragon-guy before he batters you senseless. If you are in possession of some nunchucks then you will be able to stay just out of range of his attacks. If not then be prepared to feed in a few credits...

MICRO MAN

As the affable presenter of Micro Live, Fred Harris brought computers to our television screens in the pioneering Eighties. Paul Drury asks him about coding and quality knitwear

IF YOU WERE A BOY GROWING UP IN THE SEVENTIES, YOU HAVE MUCH TO THANK LESLEY Judd for. She was the rose between Peter Purvis and John Noakes on *Blue Peter*. She danced with Pan's People on *Top Of The Pops*. She played the coquettish 'mole' in *The Adventure Game*. Now you can add getting Fred Harris onto *Micro Live* to that list.

"I'd been up all night working on a script and I remember getting this call at eight o'clock one morning," recalls Fred. "They said, 'Lesley is ill, can you come and do an outside broadcast today?' It was miles away from my home and it was snowing but I ended up fronting the show that night with Ian McNaught-Davis. David Allen, the series producer, came up to me in the green room afterwards and said, 'interesting to know you can do it...'"

Already a familiar face on television through his long stint on children's favourite *Play School*, Fred ended up jointly presenting *Micro Live* with Lesley and Ian from 1984 to 1987. He was a sensible choice, given his experience with live TV and his abiding interest in science and computing. Having studied maths at Bristol University, he trained as a secondary school maths and drama teacher, a rather unlikely combination but one that prepared him well for a career in educational broadcasting. In the early Eighties, he produced *Using Your Computer*, an innovative two-cassette package aimed at schools, which synchronised audio instructions with a computer programme running on the BBC Micro. "I actually knew nothing about the BBC computer when I fronted that live broadcast," he admits. "I had an old ZX81 and Spectrum at home!"

Thankfully for Fred, *Micro Live* was moving away from the BBC machine being the primary focus of the show, as it had been for its predecessor *Making The Most Of The Micro*, screened in 1983. The new programme took a broad view of the computing revolution and content ranged from a preview of the Amiga to reports on robotics and the use of micros in the music business. As the title of the show suggests, the vast majority of features were filmed live, a rather brave decision considering the temperamental nature of technology.

"The previous programmes in the BBC computer series had been pre-recorded," explains Fred, "and they were getting letters, quite rightly, from viewers saying 'it's alright when you do it, it always works but when I try it, my computer crashes'. David and the team thought, 'okay, let's show them it is possible to do it live, warts and all. If it crashes, it crashes! We'll make something of it...'"

It was this approach that treated viewers to the memorable incident when presenter John Coll's email was hijacked by savvy hackers live on air, who thoughtfully left a poem boasting of their password-cracking skills. This talk of passwords brings back fond memories for Fred of his co-host Ian McNaught-Davis. "He was fantastic to work with and had a lovely sense of humour. His password, which quite often he had to type in on air, began with a B and ended with OLLOCKS. He was a delight."

Ian sadly passed away earlier this year at the age of 84. *Micro Live* too passed into history in 1987 and there hasn't

» Let's programme like it's 1984

» Inside the EDSAC

really been a television programme like it since; one that took a serious look at computers and their diverse uses but with a sense of humour and a desire to encourage the viewers to engage with new technology. "I think *Micro Live* was successful because people were just beginning to see the possibilities," suggests Fred. "The Eighties were probably the first time most people had seen a computer. It was an exciting time to live through. And though it was a programme with a lot of fun in it, it didn't dumb down. I wouldn't have been interested in a programme that did that. Even *Play School* never dumbed down. My attitude was always, these kids might be brighter than me, it's just they haven't lived very long..."

We seize this opportunity to settle something that has bothered us since the Seventies. Each episode of *Play School* would invite its young audience to guess which window they would look through that day, the cue for a 'real world' segment in the show. Across the land, bets would be laid between siblings and friends and choosing the correct window was a major victory. So just who decided what window would win, Fred?

"Have you not sussed it?" He smiles. "The shape of the window would relate to what the film was about. So if it was about wheels, it was the round window. On the back of this, when my son was five years old, he would look at my script and then go into school and for a sweetie, he would tell his classmates what it was going to be that day. My favourite? I'll say the arched window."

On that revelation, Fred heads off to deliver a fascinating talk about his *Micro Live* days alongside producer David Allen, which includes much nostalgia-inducing footage from the show. Before he leaves, we can't resist firing one more question at him. Given the eye-catching array of garish jumpers he sported while presenting the programme, did he choose his own knitwear? "I did," he grins, sheepishly. "Guilty as charged!" ✱

Thanks to the National Museum of Computing and Ian Pare for providing the photographs.

» Some of the many machines on display at the National Museum of Computing.

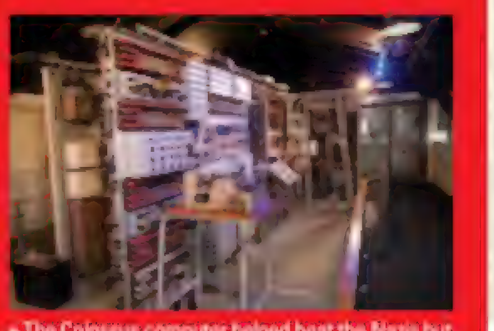
» David Allen (left) and Fred revisit their *Micro Live* days.

COMPUTER LOVE

Kevin Murrell on the code-breaker Colossus

Fred was speaking at the wonderful National Museum of Computing at Bletchley Park near Milton Keynes. The museum has a truly impressive collection, including a remarkable rebuild of Colossus, the world's first electronic computer used by British code-breakers during the Second World War, and a Harwell Dekatron/ WITCH, the oldest working digital computer in existence. "We trace the seven decades of computing history in working machines," explains trustee Kevin Murrell. "Computers are now embedded in modern life and it is essential we understand the digital avalanche of the past few decades to gain perspective and to begin to get any idea of what might be coming next."

As well as historically significant machines – we were very taken with the Cray supercomputer from the Seventies with its spaghetti-mountain of wires and the EDSAC machine currently under construction – there are plenty of 8- and 16-bit machines to play with and a roomful of BBC Micros set up like a classroom circa 1984. You'll also spot an intriguing display of pocket calculators, a huge collection of old computer magazines and a celebration of the often overlooked role of women in the development of computer technology – we can't be the only ones that didn't know Hollywood star Hedy Lamarr pioneered Wi-Fi connectivity. Visit www.tnmoc.org for more on visiting and supporting this wonderful place.


» The Colossus computer helped beat the Nazis but you'd struggle to play *Wolfenstein* on it.

THE PERSONALITY PEOPLE

MARTECH GAMES

Formed in 1983 by an ex-teacher and his brother-in-law, Software Communications, aka Martech Games, became famous for its personality-licensed games in the mid-Eighties. Graeme Mason speaks to its founder to discover more...

By 1982, David Martin had risen to head of the chemistry department at the Lady Manners School, Eastbourne with a seemingly long career in teaching ahead of him. "But I was never really that passionate about teaching; I wandered into it after not knowing what I wanted to do after university," begins David. "As I became responsible for bringing the first computers into school, I started writing small programs for fun." When the ZX Spectrum was released, David saw a way of combining the new technology with his love of board games. "I got an idea in my head for a game called *Conflict*, which was about mining resources and building armies. The computer randomised every square, so it was always different." While this part of *Conflict* was written in BASIC, the cassette was just a minor part; also included was a map, markers, instructions and counters. "Every copy had 100 counters in it," remembers David with a wince, "and I think we bought practically every tiddly-wink in the country!" The game was novel – but a predictable nightmare to produce and sell. "I sold the first six units to a computer game shop in Brighton," he recalls. "And someone suggested I contact the buyer at WHSmith." During the subsequent meeting, David realised there was no way *Conflict* was going to be a serious commercial game. "The guy at Smiths said he wanted several hundred copies," he laughs, "which was way beyond anything I could do. But I remember looking at an early copy of *Computer & Video Games* and thinking 'this is going to be a big business' – and I wanted to be part of it."

David devised a brand for his new venture, Martech, plus formed a limited company in 1983 called Software Communications with the idea being it would front various different sub-labels. Teaming up with his brother-in-law, John Barry, who had just opened his own law business in Pevensey Bay, Sussex, Martech occupied the offices above, made possible thanks to a helpful investor. David explains: "We met up with a company in Brighton who exported things like chocolate and medical supplies and had virtually ▶

▲ David Martin (centre) stands within Martech's Olympia show stand in 1986

"I think we bought practically every tiddly-wink in the country"

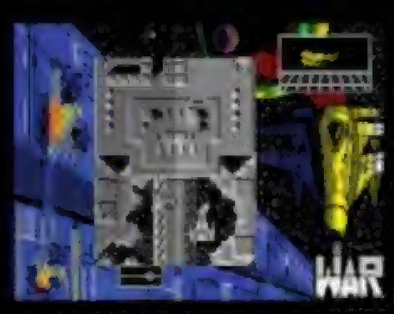
DAVID MARTIN ON THE BOARD/COMPUTER GAME CONFLICT

» [ZX Spectrum] Is Sam bluffing?

IN THE KNOW

- The name Martech is a combination of David's surname and technology.
- Martech's first game, *Conflict*, was an ambitious mix of video and board game. Had it been successful, it would have caused a catastrophic worldwide tiddly-wink shortage.
- Thanks to its distribution network, Martech published several early Durell titles such as *Scuba Dive* and *Harrier Attack*.
- David Martin contributed some of the graphics to the Spectrum version of *Eddie Kidd Jump Challenge*.
- Martech did a deal with Channel 4 to released two educational titles on its programmes *The Living Body* and *The Planets*. When *The Living Body* bombed, more gaming elements were introduced to the second game.
- Both *The Living Body* and *The Planets* had professional endorsement in Dr Christiaan Barnard and Heather Cooper respectively.
- The 1988 game *Vixen* had to be renamed *She-Fox* in Germany due to the original title sounding like an unsavoury German sexual slang term.
- Screen 7 replaced Martech in 1989. "We were looking for more gravitas as an entertainment company but it didn't work. The writing was already on the wall," says David Martin.

» [ZX Spectrum] Martech's button-masher, *Brian Jacks Superstar Challenge*.



» [ZX Spectrum] Jas Austin's downward-scrolling shooter, *War*.

» [ZX Spectrum] Terminator-squishing fun in *Nemesis The Warlock*.

» [ZX Spectrum] Creative Reality's brilliant *Rex*, one of the last great games to appear on the ZX Spectrum.

» One of Martech's later adverts with one quality game (*Rex*) and two forgettable ones.

TIMELINE

1982 DAVID MARTIN CREATES CONFLICT FOR THE ZX81 AND ZX SPECTRUM.

MARTECH BECOMES A BRAND NAME AS DAVID QUITS TEACHING AND FORMS SOFTWARE COMMUNICATIONS LTD. AN INVESTOR IS FOUND AND OFFICES OPENED ABOVE THE LAW PRACTICE OF HIS BROTHER-IN-LAW, JOHN BARRY, WHO ACTS AS LEGAL ADVISOR TO THE NEW SOFTWARE HOUSE.

1983

MARTECH'S FIRST OFFICIAL PERSONALITY LICENCE IS RELEASED, EDDIE KIDD JUMP CHALLENGE, CODED BY IAN MCARDLE WHO BECOMES A MARTECH REGULAR.

1984

A BUSY YEAR FOR THE BOYS FROM PEVENSEY BAY WITH BRIAN JACKS, GEOFF CAPES AND ZOIDS ALL GETTING 8-BIT GAMES RELEASED IN THEIR HONOUR.

1985

MARTECH BEGINS A SUCCESSFUL RELATIONSHIP WITH PORTSMOUTH DEVELOPER CREATIVE REALITY THAT ENDS UP CODING SEVERAL OF ITS GAMES, SUCH AS NEMESIS THE WARLOCK AND REX. IT ALSO FEATURES IN ITS FIRST MAJOR MAGAZINE INTERVIEW COURTESY OF CRASH MAGAZINE.

1986

WITH THE PRICE OF LICENCES RISING, MARTECH RELEASES A SLEW OF ORIGINAL GAMES SUCH AS PULSATOR, ARMAGEDDON MAN AND CATCH 23. HOWEVER, ITS 2000AD GAMES ARE THE BIG SELLERS.

1987

ALL OF MARTECH'S PROMOTIONAL PROWESS IS PUSHED INTO VIXEN AND IT SUCCEEDS, DESPITE THE LUKEWARM CRITICAL RECEPTION THE GAME RECEIVES. THE COMPANY ALSO STARTS UP DEVELOPMENT STUDIOS IN BRIGHTON AND WATERFORD.

1988

IN A BID TO BREATHE LIFE INTO THE BUSINESS, MARTECH IS REBRANDED INTO THE CINEMATIC-ESQUE AND ILL-FATED SCREEN 7. IT DOESN'T WORK, AND THE COMPANY SLIPS AWAY QUIETLY AT THE END OF THE YEAR.

1989

WHERE ARE THEY NOW?

David Martin

Post-Martech, its founder moved to Gremlin as marketing director, handling several major games such as *Nigel Mansell* (once again), *Lotus* and *Zool*. After Gremlin, David helped successful game start-ups, such as Caffeine Studios, plus worked with Rage Games on its licensing program. He left videogames in 2005 to focus on various non-game related businesses and is now happily semi-retired in North Devon.

John Barry

John remains in Pevensey Bay with his practice still below where Martech's offices once were.

Jas Austin

After Creative Reality folded, Jas joined Bits Studios where he developed games for the GBA and SNES in particular. Today he works at mobile developer Origin8. Look out for an In The Chair with Jas soon.

Ian McArdle

After Martech the coder began programming for scientific machines before getting involved with early web and database development. Today he is still involved in the latter while pursuing hobby projects such as converting *Catch-23* to the Windows Store.

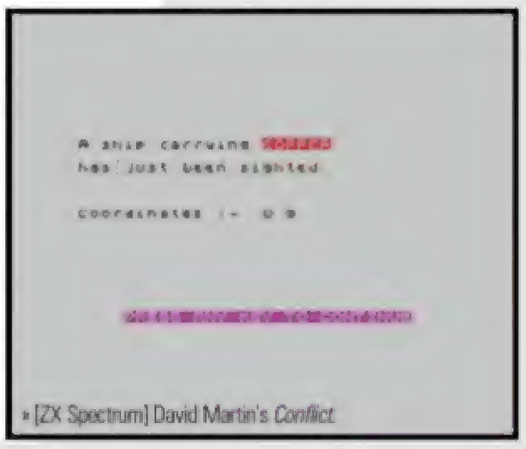
no idea what a computer games company did. But I said it was going to be a very exciting business to get into and they invested. It gave us not only funds but vital distribution channels." With games such as *Blastermind* (a computerised version of the popular code-breaking board game, *Mastermind*) and the software house rite-of-passage text adventure, *The Odyssey Of Hope*, Martech had begun to make its mark.

"We were doing okay," reflects David, "But needed a lift, something to raise the profile of our games." Martech continued to foster ideas from third-party programmers and while developing the concept of a motorcycle racing game with Ian McArdle early in 1984, a hypothetical light bulb illuminated above the Martech boss. "Eddie was a good-looking guy and extremely popular. He was in the media and did crazy things so it seemed an obvious choice to tie-in with a motorbike game." In addition to the name, Eddie also proved to be useful in other ways. "He'd often do promotions and come to exhibitions. But the first exhibition where we showed the game we did a stand basically built around his exploits. We had one of his bikes, a dummy wearing his leathers and videos that constantly showed his jumps. And it wasn't even that expensive a licence as no-one else was really doing it back then." Despite a lukewarm critical

"We were doing okay but needed a lift, something to raise the profile of our games"

DAVID ON THE NEXT STEP FOR MARTECH

opinion of the game, sales of *Eddie Kidd Jump Challenge* persuaded Martech that celebrity endorsements could be a lucrative line. "It wasn't a deliberate plan," admits David, "but we realised one of the reasons it was so successful was because you get such a wealth of material. When you have an endorsement, you get all that PR material right away: photos, images and other assets, all to promote your product." Another sports personality, Brian Jacks, who was proving to be very popular on the BBC show *Superstars*, was also signed and a game released with varied events such as arm

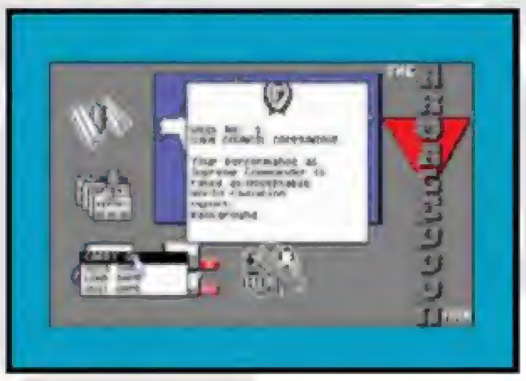


» [ZX Spectrum] David Martin's *Conflict*

dips, squat thrusts and archery making the game another success.

Yet despite already establishing a line of personality endorsements, Martech's next big licence proved to be somewhat different. The latest toy craze to sweep the UK was a mechanical-dinosaur hybrid known as Zoids. David recalls: "I'd bought one for my eldest son, the T-Rex. We built it together and he absolutely loved it. I thought it was brilliant and original." The Martech boss was quickly discovering that a whole world of Zoids existed such as red zoids, spiderzoids and even a comic. "I bought a few more and thought 'this is going to be perfect'," he says, "and went to see the guys at Tomy UK." Tomy proved to be receptive to the idea but worried that its hit brand may be aimed at too young an audience for a computer game. "But I'd seen them on people's desks and knew that older kids were buying them too. It struck me that there was an appeal there," says David, who was determined the game should

» [Amstrad] Another icon-driven strategy game, *Armageddon Man*.

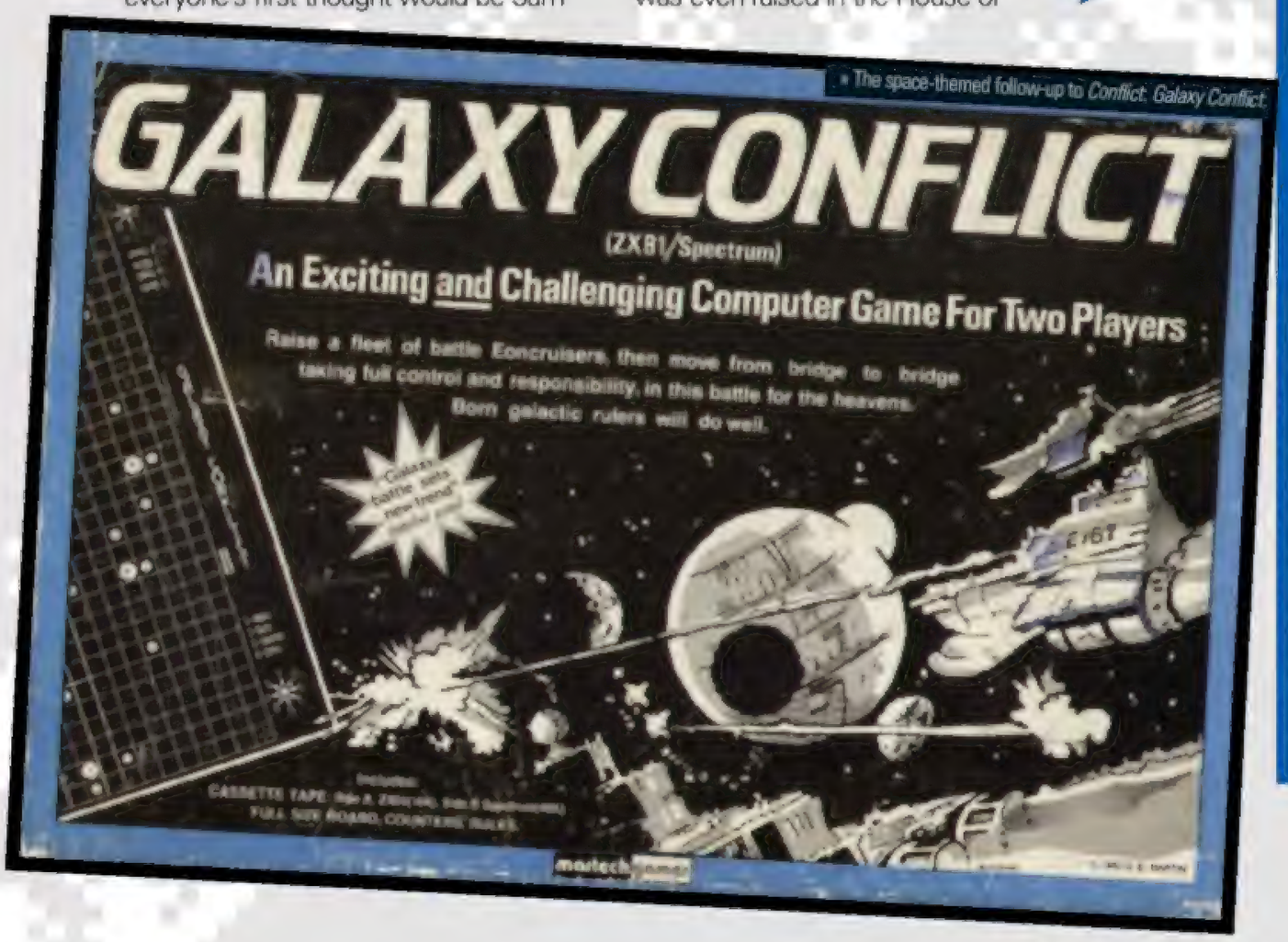


» [Amstrad] *Nigel Mansell's Grand Prix* was a competent simulation from 1988.

be original and do the licence justice. Fresh from the impressive icon-driven *The Fourth Protocol* was developer The Electronic Pencil Company, and it took charge of what became an ambitious and intriguing game. "We wanted the game to be different and I was involved with the development," says David, "but a lot of the credit must go to the programmers. We'd have meetings and they'd show me their ideas and then take it to the next stage. There were no alphas or betas back then!" *Zoids* was favourably reviewed in almost every publication (most memorably the Commodore 64 version which received a generous 96% from the normally parsimonious *Zzap!64* magazine) and sold incredibly well. "We took the Commodore version over to America for the CES show and demonstrated it to several publishers. It put us on the map because with *Zoids* we got a lot of fantastic awards."

Having also developed a game around popular strong man Geoff Capes, one fateful day a package arrived on David Martin's desk. "This guy sent us out of the blue this really good Spectrum poker game but I couldn't see how it would work commercially. Then one day I had a crazy idea that I immediately dismissed." In 1986, if you said 'page three model' everyone's first thought would be Sam Fox. "She was undoubtedly the first page three celebrity," says David, "so the more I thought about it… but then I'd think, 'Smiths are never going to buy this, Boots aren't going to be interested, people will think I've lost my mind.'" But the idea wouldn't subside and David eventually yielded to his constant internal nagging. "There was no internet then so it involved a lot of legwork and phone calls to get her manager," he remembers. "But I knew if I could get a meeting I could sell the idea." With the original game's author keen, Martech soon began brainstorming a plan of attack. "We decided the content should not be contentious," says David, "making the final screenshot essentially a page three picture. And we wanted to do it in a fun way where Sam started off in a coat, gloves and scarf." Still worried about distribution, the Martech chief arranged a meeting with the games buyer at WHSmith. "We showed them the artwork and waited nervously. But they loved it. The guy was calling people in and telling them they had to get this game. They put a big order in straight away." Yet despite WHSmith's enthusiasm, controversy was never far away for *Samantha Fox Strip Poker* and its publishers. "We were happy to hike the publicity," admits David, "a question was even raised in the House of ▶

» The space-themed follow-up to *Conflict*, *Galaxy Conflict*.



DEFINING GAMES

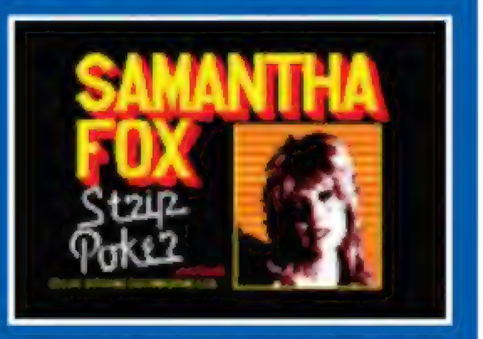
Eddie Kidd Jump Challenge ZX Spectrum

In 1984, Eddie Kidd was the man. Originally a stunt performer, his remarkable feats earned him fame and transformed the Londoner into a household name. Thus, when Martech began developing a motorcycle game and David Martin hit upon the idea of a personality licence, there was only one candidate. Unfortunately the game itself, while perfectly playable and a reasonable simulation of jumping over a long row of buses, was by its very nature restricted.

Zoids Commodore 64

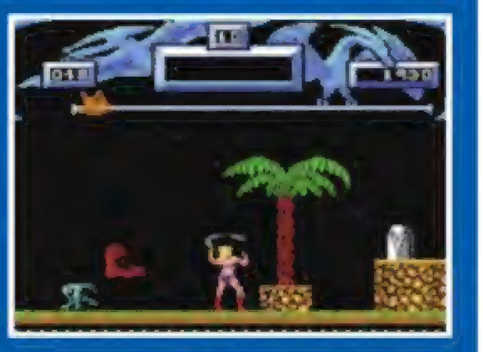
It would have been relatively simple to wedge the popular robotic dinosaurs into a platform game of some description, but with the Electronic Pencil Company keen to show off its iconic abilities once more, *Zoids* was destined to offer considerably more depth. Playing a lone human, the player's task was to pilot a spiderzoid and find the missing pieces of Zoidzilla before taking control of the blue zoid leader in battle against its nemesis, the mighty Redhorn the Terrible.

Samantha Fox Strip Poker Amstrad



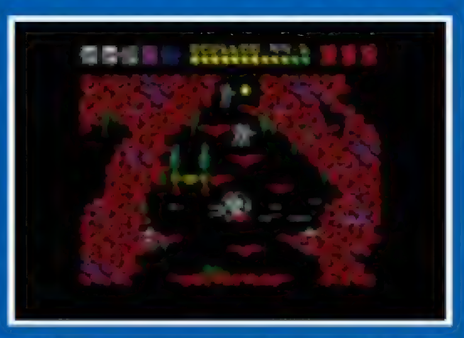
Starting out as a simple, if polished version of poker for the ZX Spectrum, the addition of possibly the most famous page three model ever transformed the game into a bestseller. Pixellated ports were swiftly arranged for the other formats with varying degrees of success and with the final money-shot nothing more than a page three picture, *Sam Fox Strip Poker* hardly justified the bleating of the press at the time. Not that Martech complained, as sales rocketed.

Vixen Commodore 64



Although not technically endorsed by Corinne Russell, Martech's use of the page three model increased the exposure of what transpired to be a fairly run-of-the-mill game. Playing the title character, *Vixen* had the ability to morph into a fox and wielded a magic whip that she used to tame the wild dinosaurs of the planet Granath. Utilising an early form of motion capture, the game was pretty but lacked substance, although Martech's excellent relationship with *Your Sinclair* no doubt helped sales.

Rex ZX Spectrum



With the commercial failure of *The Fury*, Martech was on the verge of dropping the Creative Reality boys. When the developer made a last-ditch attempt to curry favour with a short demo entitled 'The Peeps Game', David Martin saw enough to give them another chance. The result was *Rex*, the tale of a simple Rino-Sapien mercenary who must rid the planet Zenith of its nasty and destructive human inhabitants. With multiple weapon power-ups, neat and colourful graphics and some engaging blasting fun, *Rex* was one of the last great games to appear on the ZX Spectrum in the Eighties. For the full story on *Rex*, check out **Retro Gamer** issue 112.

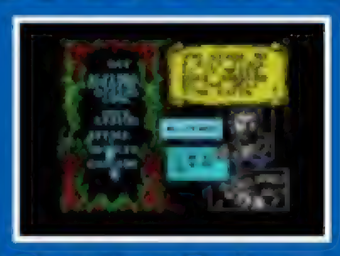
THE DNA OF... MARTECH

Personality

Martech soon discovered a niche in the market for games branded around a famous person. Its best-selling games came from such efforts.

Expertise

David Martin's experience of board games helped give Martech a foothold with *Conflict* and *Galaxy Conflict* while John Barry's legal skills were also put to good use. In short they used their considerable skills to ensure Martech had the best start.



Trust Your Coders

While pre-development often consisted of a meeting with the coders in order to spit ball ideas, Martech left most of the design to the men and women who programmed the game, resulting in some truly groundbreaking ideas.

The Kids Are Alright

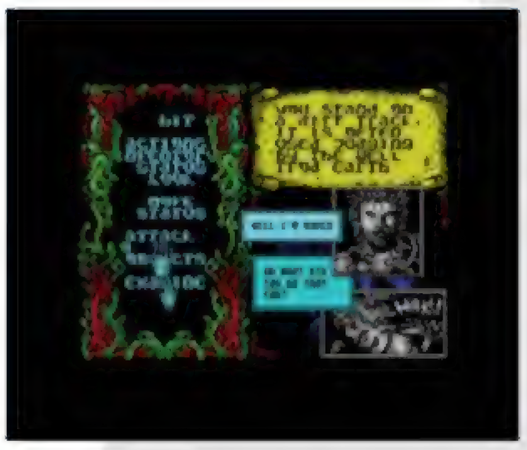
Paying attention to what was entertaining his boys paid dividends twice for Martech with both *Zoids* and its *2000AD* games proving decent hits. Licensed games can often prove popular for publishers, and Martech was no different.

He Who Dares Wins

David Martin was never afraid to aim high especially when it came to getting the most famous page three model for Strip Poker. As a result *Samantha Fox Strip Poker* was very popular. It was actually created by coder Simon Nicol.

Trying To Be Different – Trying To Be Better

From the board game/computer game hybrid *Conflict* to the ambitious complexity of *Zoids*, via the random semi-intuitive control of *Slaine*, Martech was certainly not afraid to try something different.



» (Left) [ZX Spectrum] *Slaine* was a nice idea and had beautiful graphics, but was just too frustrating to play.

» (Below) [C64] The Commodore 64 version of *Uchi Mata* was clearly the best.

▶ Commons, it made the national papers and I was quoted as saying some ridiculous things that I never said. All in all, very nice publicity!" For the game itself, Martech's developers utilised an early system for converting photos into images on-screen. While advanced for its time, the images tended to be quite pixellated, but the software did its job and *Samantha Fox Strip Poker* became another outstanding seller.

With a constant eye on the next project, Martech began working with developer Catalyst Coders and its employees Jas Austin and David Dew were assigned to work on Martech's next major acquisition, *Tarzan*. "That was a fantastic licence," grins David, to this day still clearly enthused by the memory. "I went out to America and went to Tarzana which is a real place built around Edgar Rice Burrough's original estate near Los Angeles. They were naturally very protective of the brand and determined it be done correctly." With such fantastic resources and artwork at its fingertips, Catalyst was left to create the type of game it saw best to represent the vine-swinger. "The mistake we made with *Tarzan* was that the guys who developed the Spectrum game were a really good team and they created this huge game stuffed with places to explore, traps and enemies. But it was just too difficult for the majority of players who would never see most of what the game had to offer." David partially blames himself for this; by now his time was taken up more and more with the day-to-day running of the company and his hands-on approach of the early days had all but disappeared. "It got a lot of attention, we had a great advert and the Americans wanted it," says David. "So it did our profile a lot of good. But *Tarzan* is still one of my biggest regrets."

With Brian Jacks still on board, it was also time for his specialist sport to get a computer game, with David reasoning that a game based on judo would be as popular as most other fighting games. "Brian had won judo championships all around the world and with the popularity of fighting games, we thought there was scope for a judo game. I developed this idea with the coders where you could use the joystick to create a combination of moves and thought we came up with a really neat little game." Unfortunately *Uchi Mata*, despite some reasonable reviews on the lead Commodore 64 version, was a poor seller. "To be honest – it lacked the violence. Not that we wanted it, but karate's all about snap and crack, judo is more gripping, throwing, strategy and thought. And for that reason it maybe didn't appeal to a lot of kids." Nevertheless, the *Superstars* champion still provided excellent promotional assistance at exhibitions as David remembers: "At one show we did this challenge: anybody who could escape Brian's grip we'd give them £100 and they had 30 seconds to do it. Eventually, the word went around and rival publishers were sending round these taekwondo guys. But none of them did it. They couldn't move a muscle and said it was like being locked in concrete."

Explains David: "One of my boys was mad about the comic *2000AD* – he collected them, knew all the characters, artists and scriptwriters." Meantime, Jas Austin and Dave Dew, the men behind Martech's *Tarzan*, had joined forces with Neil Dodwell as Catalyst collapsed under financial pressure. The trio formed Creative Reality and one of

"We filmed for a couple of days while Corinne ran, crawled and jumped with a completely black background and just a leotard on"

DAVID MARTIN ON THE POPULAR MO-CAP SESSIONS FOR VIXEN

» The *Tarzan* license represented a good score for a smaller software house such as Martech.

» [ZX Spectrum] The atmospheric but rock-hard *Tarzan*.

Martech picks up *Tarzan* deal

their number happened to be another fan of the legendary comic. "Jas gave us the lead on which characters to go for," says David, "and he suggested Slaine and Nemesis The Warlock. Basically I think he told us his two favourites!" With the artwork and history in place for the characters, there was masses of potential. "For the first game, *Nemesis*, they came up with this idea of using the bodies of enemies you had killed to climb up the screen," reveals David with a smile. "They weren't sure I'd go for it, but I loved the idea. The bodies would even occasionally sprout little aliens!" Unfortunately, *Nemesis The Warlock*'s follow-up, *Slaine*, was a bit of a mess – if a glorious, valiant mess. "It was an attempt to do something different. The idea was of thought processes and them popping into your head and the player trying to latch onto them," grimaces David. "But ultimately the interface became too frustrating. *Slaine* was a nice idea but it would have been better maybe as a straightforward adventure game. But we wanted to come up with a novel idea." Nonetheless, Martech's *2000AD* games still sold in decent numbers, no doubt helped by covers created by the original comic artists.

By 1987, the 8-bit market was beginning to slow down. 16-bit computers had appeared and an emphasis on price over quality was evident. While it had produced some high-profile games, Martech was still a relatively small publisher, and the rising costs of licensing other properties was beginning to take effect. Despite veteran coder David Looker having produced a reasonable recreation of grand prix racing for its Nigel Mansell endorsement, costs were beginning to eclipse revenue, making imitation, rather than acquisition, an enticing avenue.

"It was based on an arcade game. Not – ahem – officially, but we took a lot of elements from the original, such as the chain," remembers David. The arcade title was called *Rygar*; Martech's 'homage' was *Vixen*, and the glamour industry would feature once more. "Our PR agent, Simon Harvey, proposed working with Corinne Russell. She was very popular and one of the Benny Hill girls. It seemed like a good angle." Martech hired a top-rated photographer for the various photo shoots and employed an early form of motion capture for the game's

» [Amstrad] *Zoids* was an excellent game on every format.

animation. "We filmed for a couple of days while Corinne ran, crawled and jumped with a completely black background and just a leotard on." While David cannot recall exactly how the development team turned these (no doubt popular) sessions into the game's animation, it was certainly an effect that was appreciated when the game was reviewed. And on the Spectrum in particular, *Vixen*'s marketing campaign was an outstanding success. "The *Vixen* poster edition I believe became *Your Sinclair*'s biggest-selling issue," smiles David proudly. "Teresa Maughan was the editor at the time and she was great and really pushed it. It was different and I guess it was nice to have a female protagonist for once." Martech ensured the cycle of promotion – announcement, previews, teasers, promotional shoots – all built up, and the game fitted the process perfectly.

But despite the success of *Vixen*, behind the scenes, things were shaking in Pevensey Bay. "We were beginning to realise we couldn't keep publishing licensed games ourselves," laments David. "And we'd set up a studio in Brighton before creating another in Waterford. Costs were going through the roof and it was just getting crazy." The Waterford developer – Emerald Software – was charged mainly with 16-bit conversions from publishers such as US Gold. "We had gone from a small team contracting programmers to 25 people working at Emerald, eight or nine at Brighton plus a couple of other teams on contract. With office staff such as secretaries, sales and production managers, we suddenly had almost 50 people to support. That's when the cracks started to appear." Despite *Vixen* and the critical success of Creative Reality's Spectrum classic, *Rex*, Software Communications began to focus on the Amiga and Atari ST with varied results. "Eventually we didn't have the products coming through to fund it all," says David sadly, "and we needed either investment or a hit." In addition, David had invested in property; the subsequent crash of the late Eighties lost it even more money. An ill-advised re-branding couldn't save the company. "Screen 7 was a last-gasp attempt to do something different. It was a move of desperation and in hindsight there was nothing wrong with the Martech name. But I just got it stuck in my head that we should have a new brand."

After a handful of games, Screen 7 was not seen again after 1989. David soldiered on with Emerald for a few months before it too folded. "My big regret was always that I strayed too far away from the games themselves," he reflects, "as I inevitably became more and more involved on the business side." Yet despite the difficult end to Martech, its founder has good memories of the mid-Eighties in particular. "That period – when we were licensing famous people such as Brian, Eddie and Sam – it was a very exciting time. Meeting all those celebrities and closing big deals – they were good days and I wouldn't change them for anything." ★

Our special thanks to David Martin. For the full story on Martech's *Rex*, check out issue 112 of Retro Gamer.

MARTECH'S PERSONALITIES – WHAT THEY DID NEXT

Nigel Mansell
When his hugely successful driving career came to an end, Nigel indulged in his second-favourite pastime, golf, purchasing the Woodbury Park golf course in 1994. He still owns the course today.

Brian Jacks
An Olympic athlete and renowned judo expert, Brian shot to fame in the BBC programme *Superstars*. Today he lives in Thailand where he owns and runs a block of apartments tailored for ex-pats.

Geoff Capes
Another famous British Olympian, Geoff Capes continued his career in the World's Strongest Man competitions of the mid-Eighties before recently becoming better-known as a budgerigar breeder.

Zoids
Having become disillusioned by the end of the Eighties, their dreams crushed by a bunch of cheap transforming robots, rumours of alcohol and drug abuse emerged. Today, the Zoids all live in a residential home in Cheshunt.

Sam Fox
By the time *Strip Poker* was released in the UK, Sam had already quit her modelling career to continue her dream of becoming a singer. Today she still tours in between writing an autobiography and her TV appearances.

Corinne Russell
The page three sensation and Benny Hill star continued modelling into the early Nineties before co-founding her own agency. Corinne now prefers a relatively low profile away from the public eye.

Eddie Kidd
The stunt master continued to star in daredevil acts and achieved even more fame with an appearance in a Levi jeans advert. Sadly, Eddie suffered a major injury in 1996 that prematurely ended his motorcycling stunt career.

» [Amiga] Emerald didn't produce many great games and the Amiga version of *Moonwalker* certainly wasn't one of them.

» [Amiga] A rare original game from Emerald, the shooter *Phantom Fighter*

Minority Report

CLASSIC GAMES YOU'VE NEVER PLAYED

NEO-GEO CD

Owning a Neo-Geo CD console is definitely the most accessible, and cheapest, way to experience many classic Neo-Geo titles as well as a multitude of less-well known gems. Mike Bevan discovers how there's more to the platform than The King Of Fighters and Metal Slug

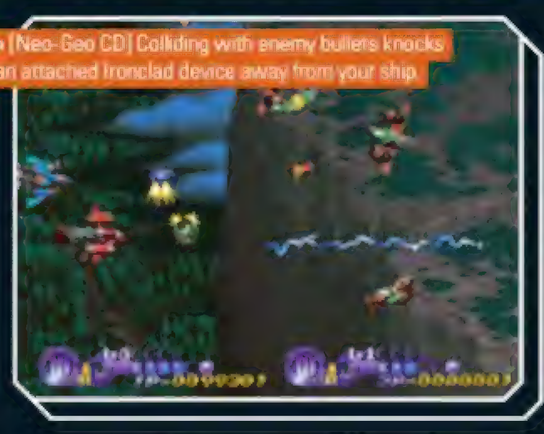
IRONCLAD

■ DEVELOPER: SAURUS ■ YEAR: 1996

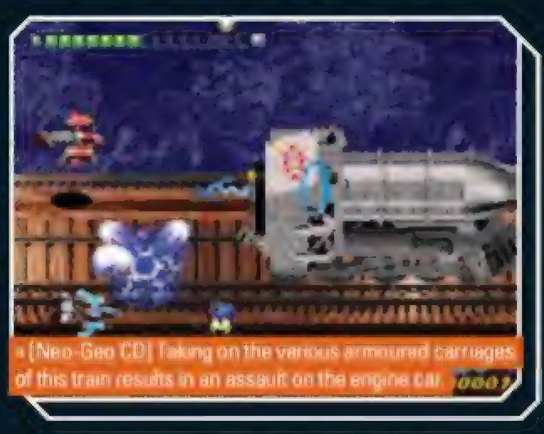
■ Shoot-'em-up *Ironclad* (aka *BRIKIN'GER*) is possibly the most notable of the limited catalogue of Neo-Geo CD-exclusive games if only for one thing – its price and rarity. Developed by Saurus, the company behind the excellent *Shock Trooper* run-and-gun series on the cartridge-based Neo-Geo systems, the game was only released in Japan, and used copies nowadays change hands around the £150-200 mark, making it the priciest and most desirable CD title for collectors.

The various Neo-Geo platforms already have a number of excellent horizontal shooters, such as *Pulstar* and *Blazing Star*, which won't set you back as much as that (at least on arcade MVS cart) but *Ironclad* is still certainly worth experiencing. Graphically, the game is rather unique for the platform, combining handsome baroque stylings with a skewed isometric perspective similar to that seen in Cave's *Progear*. The backdrops, taking in medieval towns, caves, forests and vast fortresses, are varied and impressively drawn, while the sprites have a chunky, pre-rendered CG look which works very nicely indeed. There are 16 different levels set out in a pyramidal branching layout familiar to players of *Star Fox* or Taito's *Darius* series, leading to several different endings and adding to the re-playability of the title.

"The game combines handsome baroque stylings with a skewed isometric perspective"



■ [Neo-Geo CD] Colliding with enemy bullets knocks an attached Ironclad device away from your ship



■ [Neo-Geo CD] Taking on the various armoured carriages of this train results in an assault on the engine car.

Three different selectable ships are available, with varying attributes like speed over firepower and vice versa, and the game supports simultaneous play for two armchair pilots. Ship selection aside, the most valuable trinket in your offensive armoury is the Ironclad itself, a spherical device similar to the Force orb from *R-Type*. While docked to your ship the Ironclad boosts your firepower, but it can be detached (and reattached) at will to form a separate satellite with its own firepower or a defensive shield respectively. Holding down the fire-button will also charge the orb and eventually send it rampaging into enemies in the shape of a transforming mecha-like robot, a move particularly satisfying when used effectively against bosses.

There are different sets of power-ups for both your ship's weapons as well as the Ironclad, leading to interesting scope for mixing and matching the likes of buzz-saw melee attacks, flamethrowers and missiles. There's also a rather nifty screen-

clearing smart-bomb primed for emergency use, which lays waste to any nearby enemies in a spectacular flurry of lock-on lasers and white light. The bosses are generally a lot of fun to engage, from the knight commander guardian of the opening stage, battled in a sea of flame, to hulking armoured trains, massive stealth-bombers and, strangely enough, giant metallic chickens.

Although *Ironclad* was never officially released on any cartridge-based Neo-Geo platform, it was finally made available at the far more reasonable price of 1,000 points (seven quid) as a download on Nintendo's Wii Virtual Console in 2010. So even the Wii-less shooter fan among us could probably pick up a console plus the game for less than half the price of the Neo-Geo CD version and have the opportunity to get some exercise to boot...

IN DEPTH

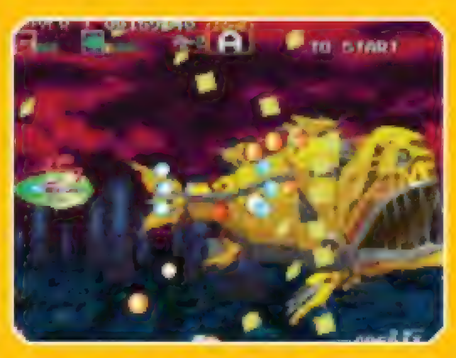
SHIP
■ Your ship suffers from reduced firepower when the Ironclad is detached.

DRILL
■ Special power-ups for the Ironclad allow it to arm attachments like this drill.

POWER-UPS
■ Standard power-ups increase your ship's firepower as per usual.

MELEE ATTACK
■ Charging an attached Ironclad sends it off on a powerful melee attack.

IF YOU LIKE THIS TRY...



DARIUS GAIDEN
SEGA SATURN

■ The last traditional 2D entry in Taito's shoot-'em-up series is one of the great underrated Nineties shooters. With the familiar branching route-selection of previous *Darius* games, *Gaiden* packs in wonderfully trippy visuals, a fantastically hypnotic soundtrack, and plenty of massive sea-creature inspired bosses. The biggest, the leviathan giant squid Titanic Lance, will certainly set players' pulses racing when approaching fast...

BLAZING STAR
NEO-GEO MVS/AES

■ An unofficial sequel to the splendid but difficult *Pulstar*, this is thankfully a much easier game to get to grips with than its predecessor. With more open, free-flowing gameplay, it places a bigger emphasis on dynamic scoring, showering you with bonus pickups and score multipliers, while throwing some seriously impressive graphics your way. Unfortunately, unlike *Pulstar* it never received a Neo-Geo CD conversion.

GRADIUS V
PLAYSTATION 2

■ The fifth official outing for Konami's famous franchise was produced by acclaimed Japanese developer Treasure, and visually at least, owes much to the company's hardcore shooter *Ikaruga*. Using a polygon engine to recreate the heroic Vic Viper and familiar mothership bosses, it looks beautiful, and the new feature to directly control your multiples and bend your lasers around the screen is utterly joyous.

Minority Report

CROSSED SWORDS 2

■ DEVELOPER: ADK ■ YEAR: 1995

■ **Another game that only got a release on the Neo-Geo CD platform, this is the sequel to an older Neo-Geo cartridge title.** It's basically a swords and sorcery take on *Super Punch-Out!!*, with enemies popping up in front of your transparent avatar as you slash away at them. There are quite a few improvements over the original, notably the inclusion of three selectable characters – a female fighter, a knight and a ninja. The game also feels more dynamic than before; characters can now dash left and right to attack or get out of trouble, and a new jump attack produces a satisfying spurt of blood from unfortunate targeted enemies. It's not all about mindless button bashing – players can block incoming attacks at two heights with their shield, and this becomes a necessity later on. Animation and background graphics are improved, and there are lots of neat little touches like the various magic spells, one of which turns your enemies into much less scary scarecrows to beat up. One fun Easter egg we liked was a castle stage where portraits of all the bosses from the first game decorate the walls.

• [Neo-Geo CD] High blocks are useful for parrying overhead attacks.

MORE GAMES TO PLAY

» WINDJAMMERS

■ DEVELOPER: DATA EAST ■ YEAR: 1995

■ **Despite its laid-back** *California Games* vibe, Data East's arcade game is simply one of the best two-player head-to-head games on any Neo-Geo system. An inspired evolution of *Pong*, volleyball and air hockey, the game involves flinging a flying disc at your opponent over a net, attempting to score in their goal zone. The skill and fun comes when you get to grips with lobbing and smashing crazy curved throws and counters.

» NEO TURFMASTERS

■ DEVELOPER: NAZCA ■ YEAR: 1996

■ ***Neo Turfmasters* is** a remarkably accessible arcade-style golf sim from Nazca, the guys that brought us *Metal Slug*. Featuring an impressive 72 holes spread over four courses set in Japan, Australia, Germany or the US, it's a very handsome game, with a mix of near photorealistic graphics and slightly cartoonish characterisations for the players, plus an evocative CD soundtrack. Unfortunately it's another rare title, and its price reflects this.

» STREET HOOP

■ DEVELOPER: DATA EAST ■ YEAR: 1994

■ **Featuring frantic three-player** match-ups and massive player sprites, this is a an entertaining basketball sim with more than a passing similarity to Midway's *NBA Jam*. There are just two buttons used to pass, tackle, block and shoot, but this keeps things fluid and simple, and the biggest thrill comes from the typically over-the-top power moves, with dunks coming in from epic heights and players nearly toppling the basket.

» LAST RESORT

■ DEVELOPER: SNK ■ YEAR: 1994

■ **Another Neo-Geo** shoot-'em-up in the *R-Type* mould, *Last Resort* is one of the easiest and least costly CD games to get hold of, and comes highly recommended. With some atmospheric sprite artwork evoking games like *In The Hunt* and *Metal Slug*, and a moody soundtrack, it's still a cracking blast, with an interesting system with a satellite pod that can be spun around your ship and used as an offensive weapon.

TOP HUNTER: RODDY & CATHY

■ DEVELOPER: SNK ■ YEAR: 1994

■ Often overlooked in favour of some of the more well known franchises on the Neo-Geo CD system, scrolling beat-'em-up *Top Hunter* is pretty much the *Guardian Heroes* of the console. Visually it's up there with the likes of *Metal Slug* with its lovingly crafted cartoon graphics, splendid animation and beautiful backgrounds. Players take on the role of a pair of intergalactic bounty hunters chasing down a group of criminal leaders spread across several ecologically diverse planets before a final showdown in the arch-villain's spaceship. A novel inclusion is the fact that both characters have extendible Inspector Gadget-style arms that can be used to bash enemies from way across the screen, or pull overhead handles for bonus points. There are also several *Street Fighter*-like special moves, accessible using a number of joystick and button combinations. Unusually, the characters can move between two on-screen 'planes' of action, similar to the technique seen in *Guardian Heroes*. Another feature that will be familiar to *Metal Slug* fans is the ability to hop into vehicles, in the shape of robotic walker-droids, and cause plenty of havoc.

» [Neo-Geo CD] Hitching a ride in a captured enemy mech, *Metal Slug*-style...

» [Neo-Geo CD] One of the most amusing things to do is throw enemies across the screen...

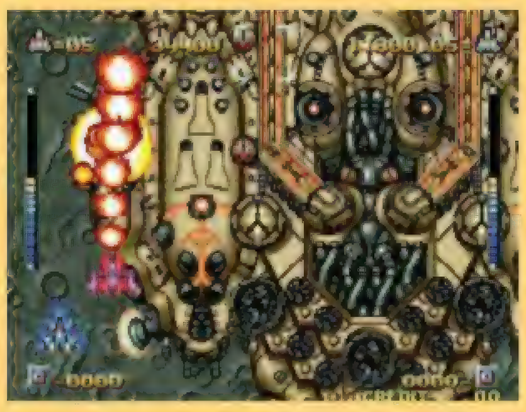
» [Neo-Geo CD] *Top Hunter*'s backgrounds are richly detailed and look just lovely

RETRO JUNKER

» POWER SPIKES 2

■ DEVELOPER: VIDEO SYSTEM/SNK ■ YEAR: 1995

■ A volleyball sim viewed side-on, where taking a dimension out of the game results in a dull experience. We remember a C64 title called *Bump, Set, Spike* which was miles better than this. And it only cost two quid.



» ALPHA MISSION II

■ DEVELOPER: SNK ■ YEAR: 1994

■ While shooters like *Pulstar* reign supreme on the Neo-Geo, vertical-scrollers are less common, the *Aero Fighters* games being a popular exception. This is another, pleasingly reminding us of old-school arcade games like *Starforce* and *Slap Fight*. The complicated power-up system takes a while to get the hang of, but ultimately adds greatly to the game as you build up a mega-powerful ship with bolt-on armour and weaponry.

» TWINKLE STAR SPRITES

■ DEVELOPER: ADK ■ YEAR: 1997

■ We realise that we're always harping on about how brilliant *Twinkle Star Sprites* is, but there isn't anything else like it. A head-to-head shooter that sees you blasting swarms of enemies to send them flying over to your opponent's side of the screen in an attempt to knock them out of the game, like *Wind Jammers* it's one of the most enjoyable two-player games on the platform.

» THE LAST BLADE 2

■ DEVELOPER: SNK ■ YEAR: 1999

■ Many of the Neo-Geo CD's brawlers tend to suffer from slightly lengthy post-bout loading times, and admittedly *Last Blade 2* is no exception, but it's still possibly our favourite ever fighting game on the format. It's a wonderfully animated weapon-based combat game, with an innovative parry and reversal system adding huge scope for tactical depth. The fact it's also stunningly beautiful is just the icing on the cake.

» ZINTRICK

■ DEVELOPER: ADK ■ YEAR: 1996

■ "The farist extrusion puzzle has been designed by Neo-Geo" [sic] proclaims the title screen of this CD exclusive when you first load it up. Whatever that means, *Zintrick* is actually one of the better puzzle titles on the platform, being a sort of cute *Tetris Attack* turned 90 degrees on its side. Rounds are a frenetic race to complete coloured lines, and chuck blocking items into your opponent's screen to scupper them.

Hard Drivin'

Atari Games' Hard Drivin' sped up the charts and ushered in a golden age of polygon-fuelled racers. Rick Moncrief and Max Behensky tell Rory Milne how their pioneering simulator took pole position at the arcades

IN THE KNOW

- **PUBLISHER:** ATARI GAMES
- **DEVELOPER:** ATARI GAMES
- **RELEASED:** 1989
- **PLATFORM:** ARCADE
- **GENRE:** DRIVING SIMULATOR

THE TRANSITION FROM SPRITE TO POLYGON GAMING DURING THE MID-NINETIES FELT LIKE a seismic event but was actually just the predictable tipping of a scales that had for so long weighed in favour of 2D over 3D visuals. As the Eighties had advanced so had polygon technology, and soon 3D visuals offered a unique selling point – realism. This wasn't a point lost on Rick Moncrief, whose background – rather than being sprite-based – lay in Atari Inc's XY vector technology.

"Not long after starting at Atari in April 1977, I ran across Rosenthal's *Space Wars*," Rick begins. "I was immediately impressed with the crisp high-resolution portrayal. My argument for XY was that some space games were better represented with high contrast vectors drawn on a continuous phosphor. Rich Moore forged out our first XY game – *Lunar Lander*, then Ed Logg knocked it out of the park with *Asteroids*. I started a group named Support Research and we continued development of XY, increasing the speed of the vector generator and converting to colour. The group's goal was to provide technology to the game groups in Coin-Op."

Hard Drivin'

» **(Above)** [Arcade] *Hard Drivin'* starts you behind other drivers, but lap times are more important than position.

» **(Above left)** [Arcade] The loop in *Hard Drivin'* is difficult enough without meeting another driver halfway through.

While Rick's group was refining Atari's XY system in California, MIT graduate Max Behensky was joining the firm's Massachusetts research lab. "In 1982, friends of mine and I started work at the Atari Cambridge Research Lab. Marvin Minsky had come up with the idea for a 'force feedback' joystick. I thought that was really cool, and so I got together with Doug and Peter Milliken, and we built one. The prototype was a success, and it got me thinking about other force feedback game controls. Doug's dad Bill had done some of the pioneering work on mathematical analysis of car handling, and we were both motor heads. We decided to come up with a force feedback steering wheel that could give accurate control to a driving game. We built a prototype, and took a trip out to California to Atari to show these controls around. I met Rick Moncrief – he wanted to develop a driving simulator, and our force feedback steering wheel was perfect for that."

After this meeting, however, during the spring of 1984, Atari Inc crashed, which affected both men and the simulator they had discussed. "During and after the crash of Atari Inc, I tried to hold a portion of Coin-Op together," recalls Rick. "My days were consumed with personnel and project management reviews. [I was] cut much more as a technologist than a project and personnel manager. I was finished with [Support Research] and wanted to design and build a product. After I started [a new, smaller] group it needed a name for accounting and the like. The Applied Research crew was a 'hard science' type group. Erik Durfey 'transitioned' with me. He was in the thick of every system we built. I added people to Applied Research based on project needs. The first was Max Behensky."

Max remembers the effects of the crash and also how useful his research and connections proved on joining Rick's team. "Atari got broken up, and the Cambridge lab closed down. In the spring of 1985, Rick gave me a job with his new Applied Research group to work on developing a driving simulator. The force feedback controls came first. Next, I worked on the physical model of car handling with the assistance of Doug Milliken and his dad. We were waiting on another group at Atari to develop a 3D polygon display system, but it kept getting delayed, so we decided to roll our own."

Although pleased by the progress made on modelling, as Rick explains, that polygon display system and Max's coding workload would require his team to expand. "After six months of trying to get traction on the modelling effort we were finally in very good hands. Max didn't have additional weekends to help meet deadlines – he needed ▶

» [Arcade] *Hard Drivin'* rewards qualifying lap times with a championship lap raced against the Phantom Photon.

» [Arcade] They cost you engine breaking and control but *Hard Drivin's* automatic gears are the easier option.

Hard Drivin'

PIONEER POLYGON RACERS
More titles that helped define polygon racing

WINNING RUN
YEAR: 1988 **SYSTEM:** Arcade

■ *Hard Drivin'* may be the earliest polygon racer most gamers remember, but Namco's *Winning Run* roared into amusement arcades a year before the Atari coin-op. *Winning Run* is very much a spiritual successor to *Pole Position*, in fact, it feels like a polygon recreation of Namco's genre-defining classic.

STUNT CAR RACER
YEAR: 1989 **SYSTEM:** Various

■ Although Geoff Crammond's *Stunt Car Racer* may look basic in comparison with later polygon racers, there's no denying that it excels in gameplay terms. *Stunt Car Racer* also has you tearing around its insanely dangerous courses at high speed – even in its 8-bit incarnations – which is an impressive feat.

VIRTUA RACING
YEAR: 1992 **SYSTEM:** Arcade

■ The visual benefits *Virtua Racing* gained from the rapid advances made in polygon-generating tech during the Nineties are clear to see. Looks aside, Yu Suzuki's first polygon-powered title offers gameplay to rival his earlier sprite-scaling racers, and in many respects, *Virtua Racing* improves on classics like *OutRun*.

4D SPORTS DRIVING
YEAR: 1990 **SYSTEM:** Various

■ It would be slightly unfair to describe *4D Sports Driving* as a *Hard Drivin'* clone, but only slightly. Let's emphasise the game's positives, though. *4D Sports Driving* has personality; comical virtual opponents taunt you before and after races. The game also boasts imaginative courses and a selection of customisable cars.

RIDGE RACER
YEAR: 1993 **SYSTEM:** Arcade

■ Other than upping the stakes in what would become a polygon-count war, *Ridge Racer* was also one of the first polygon racers to feature texture mapping. And although *Ridge Racer*'s gameplay has had its critics over the years, it should be noted for popularising the corner-cutting concept of drifting.

DEVELOPER HIGHLIGHTS

MARBLE MADNESS
(PICTURED)
SYSTEM: ARCADE
YEAR: 1984

PAPERBOY
SYSTEM: ARCADE
YEAR: 1984

GAUNTLET
SYSTEM: ARCADE
YEAR: 1985

« [Arcade] This instant replay shows a slowly driven car crumpling on collision with the loop-de-loop

▶ programming help. Max found Stephanie Mott might be interested and talked her over. I planned to use 3D hardware from another Atari effort, [but the] hardware would not be ready. I talked to Jed Margolin, I remember being surprised that he was interested. Jed was part of Support Research and had taken over the vector generator, and I thought he wanted to finish *Tom Cat*."

Rick's team was in place with Max as lead developer, but as Max points out, their simulator would be a team-effort, which was initially aimed at learner drivers. "I was the lead software engineer and game designer, although all the members of our group had input into all the aspects of game design, software design, and hardware design. It is important to realise that *Hard Drivin'* started life as a driver training simulator. Rick wanted to use accurate physics, good quality audio, and force feedback controls to provide a system to teach students how to drive. We spent from 1985 through early 1988 developing the hardware and software to do this."

As Max and Rick remember, various factors influenced their simulator's transition from trainer to videogame. "Linda Benzler worked with Doug Milliken and surveyed driving schools about the potential for a driving simulator. The results were solidly negative," Rick notes. "The answers seemed to fit the notion of multiple drivers watching filmstrip projection – not the interactive system that we were proposing." Max adds, "it became obvious to us that Atari didn't have the marketing resources to sell anything other than videogames at that point. Also, Atari was struggling financially and we figured we had better come up with a game or we might be out of a job."

Rick would take an analytical approach to this repurposed project in order to make it more fun while retaining its realism. "I surveyed driving games and tried to identify aspects that could be improved on and others that needed to be equalled. The fantasy of *Hard Drivin'* was driving that was as real as possible. Yes, we had unreal stunts in the game, but they would really work if built and driven in the real world." Max agrees and shares an inspiration, "We took the building blocks of our driving simulator, added the speed track and stunt track – which could really take advantage of accurate physics – and *Hard Drivin'* was born. The tracks had no relationship to real-world courses, although the open drawbridge was inspired by the scene at the beginning of the *Blues Brothers* movie!"

But as Max concedes, the tech required for *Hard Drivin'*s realistic gameplay and development would come at a cost. "The cabinet design started around when we switched to doing a videogame, and the audio system came around that time as well. All the hardware was developed specifically to meet the needs of the game. The main board set cost around $1,600, and the whole game came in at close to $4,000. This was unheard of at Atari – they tried to keep the main board electronics to $200-$300. However, we couldn't do a simulation driving game without a powerful main processor, a co-processor just for the physics, a fixed-point DSP for the polygon math, a polygon-rendering engine based on TI's GSP and a separate audio DSP. The main 68010 processor code was developed on a VAX using C. Our development system was an expensive in-circuit emulator that plugged into the processor socket and

« [Arcade] Reaching the finish line with seconds to spare. Unfortunately, the lap time isn't fast enough.

• [Arcade] Behind the pack but looking to catch up by doing 120 mph round a corner.

• [Arcade] As an instant replay shows, jumping the gap in this bridge too quickly sends you flying.

downloaded the program and data via a serial link from the VAX. It took 15 minutes to download the code, so we got good at patching the compiled assembly language to help with debugging. We had no emulators or debuggers for the co-processors."

THE GAME'S HARDWARE WOULD ALSO REQUIRE A RESCUED POLYGON EDITOR PAIRED WITH a track editor coded by Max, who was as new to polygons as he was to game development. "Atari had developed an earlier flat-shaded polygon engine based on an expensive custom bit-slice processor [for a game] called *Air Race*. That game never went anywhere, but Jim Morris had built a polygon editor using that hardware. Most of the 3D art was drawn using this system. I also built a custom '3D world editor' that allowed you to lay out the tracks using the 3D objects from the polygon editor. I had never done a videogame before, and had no experience with polygons. We all pretty much figured the polygon stuff out as we went along. For me, it was all new – Stephanie likewise. 3D polygons were a natural extension of 3D vectors so Rick and Jed found it familiar. I think it probably helped that nobody was used to sprites or bitmaps. When I was working on the game design, I initially had two things I wanted to incorporate. The first was 'Real Physics' – this was the most fundamental aspect of the game. I had driven lots of driving games before, but the traffic in those games just got in your way. I wanted to have 'real' competition. We didn't have any compute power to simulate anything other than the driver's vehicle, though. Stephanie and I came up with a scheme to record the data that came from the driver's car. All the traffic in *Hard Drivin'* was pre-recorded this way. This is why if you bump into another car your car gets affected but the other car doesn't. This data could be used for instant replay, and for the championship lap. I don't remember who came up with the idea for instant replay, but as soon as we tried it we knew that it was cool!"

After years of hard work, the nearly complete *Hard Drivin'* would be play-tested before release but not by focus groups. "The game took so long to develop because everything was pretty much new, and there were only five people working on it full time. We kind of flew under the radar until we were nearly ready to test. It was mostly tested in-house by us and other Atari employees. Normally, experienced arcade players would be brought to the office and shown the game, [but] if it wasn't what [they] were used to that could doom your game. We got most of the features working then brought it to [the] Golfland [arcade] on a busy night. The game was mobbed, and marketing interviewed players. Putting [it] in this more natural environment showed us that we were on the right track."

> **"The open drawbridge was inspired by the scene in the Blues Brothers movie"**
> Max Behensky

With this approach to testing proving sound, *Hard Drivin'* was soon released to great critical and commercial acclaim. "I had spent my working life until 1985 in academic environments. It was just so cool to travel to another city and see people in a random arcade enjoying something that I had a large part in developing," Max beams.

On his final thoughts, Max offers, "*Hard Drivin'* was the most original project I've ever worked on. The people I worked with were great. It was extremely challenging, we pulled it off, and it was a great success."

Rick Moncrief is left to provide the last words. "Game and project ideas at Atari came from engineers. We knew how the technology of the day could be applied. For me, the physics of driving have always intrigued. Happily, I got to give a physics driving simulation game a try."

Many thanks to Rick Moncrief and Max Behensky for their input. Documents relating to the game can be found at ww.generalsimulation.com/history/harddrivin.

DRIVEN BY HARD DRIVIN'S HARDWARE

The other titles that used Hard Drivin's tech

STUN RUNNER 1989

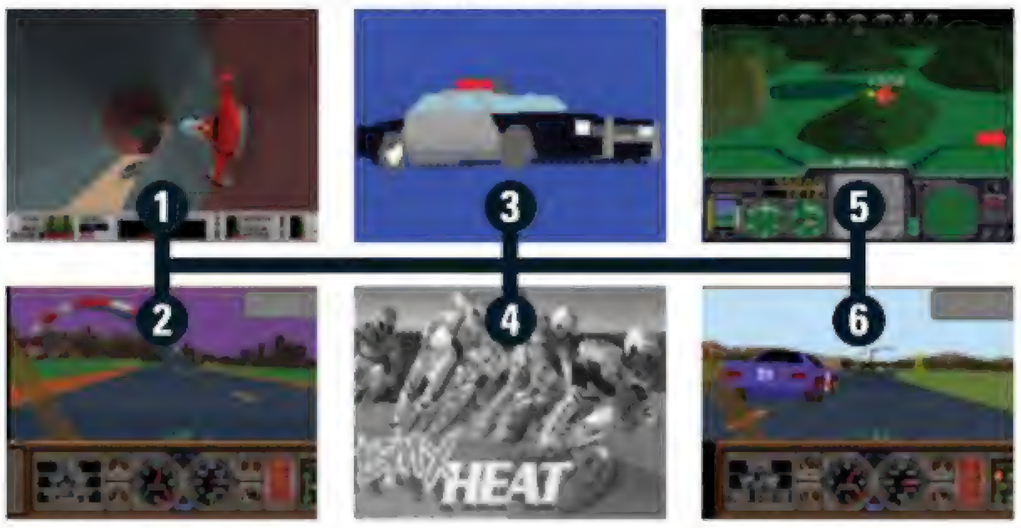
■ Ed Rotberg's *STUN Runner* took the *Hard Drivin'* hardware in a completely different direction. Ed's classic is a fusion of tube shooter and 360-degree bobsleighing that runs at breakneck speed.

AGC MOBILE OPERATIONS SIMULATOR 1990

■ A driving simulator that used *Hard Drivin'*s tech to power multi-user setups of multi-screen units. These provided training for various American police forces.

STEEL TALONS 1993

■ *Steel Talons* is to helicopter simulators what *Hard Drivin'* is to driving sims. This challenging shooter carefully balances realism with fun and was co-developed by Atari legends Ed Rotberg and Ed Logg.



RACE DRIVIN' 1990

■ This sequel to *Hard Drivin'* runs on an upgraded version of the original game's hardware. *Race Drivin'* also features several gameplay improvements such as a variety of extra tracks and a choice of cars.

BMX HEAT 1991

■ Yet another prototype game, *BMX Heat* sports pedals to make your virtual bike move and even a fan to simulate wind blowing in your face. Its gameplay revolves around a national BMX racing competition.

STREET DRIVIN' 1993

■ This second *Hard Drivin'* sequel sticks to the original's proven formula but didn't get past the prototype stage. Its main attractions are a stock car track and the option to drive a police car.

Gryzor

RETROREVIVAL

WHAT DO YOU MEAN AMSTRAD VERSION IS BEST?

» Ocean » Amstrad CPC » 1987

As an Amstrad owner you were used to receiving hand-me-down ports. The ZX Spectrum was far more popular in the UK, so you'd often have to put up with terrible ports of classic arcade games. Sure, efforts like *Midnight Resistance* and *R-Type* played well enough, but they didn't make use of the Amstrad's graphics and simply reinforced my friends' opinions that it was a terrible computer.

Of course, even when you did have a developer code a game specifically for the machine, there was no guarantee that it was going to be any good. Take the US Gold conversion of *OutRun* for example, it's a conversion so bad it kills any joy you may have had for the original game. Go through the stone bridges and it actually looks like you're going backwards, it's that painfully slow.

Thank goodness then that every now and then a game would come along and prove that not only could Lord Sugar's machine deliver great-looking games, it could actually make its rival Spectrum and C64 ports look weak. *Gryzor* was one such game and even now it's a great conversion. Many of us will actually know it as Konami's *Contra*, which was a popular arcade run-and-gun from 1987. Ocean's home conversions were released the same year, and the Amstrad version was particularly impressive. In fact it was amazing, probably the best possible port it could be.

Coded by John Brandwood, it features the same fantastic sprite design that he had also used in Renegade (which was published under Ocean's Imagine label). It's only flick-screen compared to the Spectrum and Commodore 64 versions, but it's arguably a much tighter game to play. The controls are superb, with jumping and dropping between levels handled by pushing up or down on the joystick, while holding the fire button locks you into firing and enables you to crouch. It's a solid system that really comes into its own on the into-the-screen sections that appear on every other level.

It effortlessly captures the style and gameplay of the arcade original, and ultimately that's all you can ask of any 8-bit home computer. Play it today – you won't be disappointed. ★

TOP 25 AMIGA 500

With thousands of games released for the Amiga, any title making your top 25 would have to be very special indeed. David Crookes investigates

Datastorm

- **DEVELOPER:** VISIONARY DESIGN TECHNOLOGIES
- **YEAR:** 1989 **GENRE:** SHOOT-'EM-UP

25 **This *Defender* clone** may have lacked true originality but it sure made up for it with sheer, fluid speed and flawless execution. Varied enemy armies spawned in their droves as you hurtled through the horizontally-scrolling landscape in search of eight pods, and unless you had lightning fast reactions to avoid and blast them away, early death in a thousand colourful pixels was inevitable. *Datastorm* pushed the Amiga's technology to the max.

Populous II: Trials Of The Olympian Gods

- **DEVELOPER:** BULLFROG
- **YEAR:** 1991 **GENRE:** GOD SIM

24 **Although some may** say *Populous II* is a classic game but only by association of the original, its release in 1991 came during a golden, defining era for god-sims. This direct sequel was not a major departure from the debut of two years previous but, in keeping the core and the isometric view and expanding upon them with more options, what was in effect a grandiose game of chess offered much greater scope for re-playability. Attempting to become a powerful deity via the power of point-and-click has seldom been more fun.

A sequel with a very unique spin and not just a rehash of the original formula.
Katzkatz

It Came From The Desert

- **DEVELOPER:** CINEMAWARE
- **YEAR:** 1989 **GENRE:** ACTION-ADVENTURE

23 **Undoubtedly inspired by** the big bug B-movies of Fifties America, *It Came From The Desert* was Cinemaware at its best, delivering finely-tuned slices of strategy, graphic adventure and arcade action. The game was as close to an interactive movie as 1989 was capable of delivering with each of the 20 locations perfectly capable of drawing in the player and keeping them going for long sessions at a time.

Although I enjoyed *Captive* and *Eye Of The Beholder*, I felt *Hired Guns* beat them all in terms of atmosphere

U-1

Hired Guns

DEVELOPER: DMA DESIGN

YEAR: 1993 **GENRE:** RPG

22 **Spanning five disks,** *Hired Guns* was a huge game showcasing equally sizeable ambition. DMA Design had carved out a solid reputation for scrolling shooters (and *Lemmings*, of course) but in *Hired Guns*, it was able to deftly combine a shoot-'em-up and an RPG, satiating the needs of two sets of players. Death lurked around every corner and the 19 3D levels heaved with free-moving enemies. Even though it bore similarities with *Dungeon Master* and *Captive*, it proved to be groundbreaking. The screen was split into four, each allowing different character perspectives and separate movement which was unheard of at the time and the game was also blessed with the killer combo of amazing graphics and incredible sound, the developer very much finding its feet in the third dimension. Little wonder that critics and gamers poured such lavish praise on it, with more than one reviewer at the time calling it an instant classic.

Wings Of Fury

DEVELOPER: UNLIMITED SOFTWARE

YEAR: 1990 **GENRE:** ACTION

21 ***Wings Of Fury*** was originally a well-received 8-bit action-sim that had turned many a head on the Apple II. Three years later, it was being ported to various machines including the Amiga, but it cut gamer opinion in half (*Amiga Action* went as low as 39 per cent; *Amiga Power* up to 88). It is easy to see why. *Fury* had a difficult learning curve thanks to the realistic 'sim-like' way it approached the controls which made landing the plane quite baffling at first. The speedy advances of gaming also meant the cute, cartoon graphics of *Fury* looked instantly dated – more so now – especially given *Shadow Of The Beast* was demoing Amiga graphics at the time. But *Fury*'s gameplay, while repetitive, stood up well. The World War II flight missions pitted players against the advancing Japanese and there was much weaponry to drawn upon. It suited players with fast reactions because it could get rather hectic.

Dungeon Master

DEVELOPER: FTL GAMES

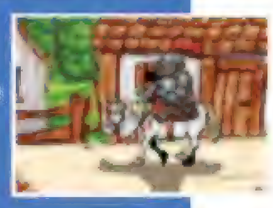
YEAR: 1987 **GENRE:** RPG

19 **Initially released as** a 1,024K-only game, the long-awaited Amiga port of this Atari ST classic flew off the shelves. *Dungeon Master* was a real-time, mouse-controlled RPG with 14 imaginative levels and some very spooky warning sounds when an enemy came close to you.

The Settlers

DEVELOPER: BLUE-BYTE SOFTWARE

YEAR: 1993 **GENRE:** REAL-TIME STRATEGY



18 **It isn't always** easy to inject personality into tiny gaming characters but *The Settlers* cracked it. In asking players to build and run a thriving city, it took a blend of *Populous* and *Sim City* and made strategy games beautifully accessible. Lovely jaunty music too.

Stunt Car Racer

DEVELOPER: MICROSTYLE

YEAR: 1989 **GENRE:** RACING GAME

17 **Viewed from the** cockpit of a supercar with its roaring metallic engine and thick tyres in full view, *Stunt Car Racer* provided challenging, gap-strewn elevated tracks full of twists and turns that would have you gripping the joystick in fear. Geoff Crammond pulled a blinder and got his name on the box.

Lotus Esprit Turbo Challenge

DEVELOPER: MAGNETIC FIELDS

YEAR: 1990 **GENRE:** RACING

20 **Of all of** the *Lotus Esprit Turbo Challenge* versions, the Amiga's stood out the most, not least because it had more race tracks than on the other platforms – with 32 in total – as well as the best graphics by some distance. It also had intricate details such as brake lights, incredible speed and a choice of audio which, coupled with precision controls, 19 rival racers and the need to finish in the top half to progress, made for some exhilarating races. In the process, the game became a benchmark for racing games on the Amiga. It was not just the level of ideas that were included such as pit stops, two different types of joystick control and the ability to use a mouse. For many, the key was the split-screen action that allowed for blistering two-person play without any noticeable on-screen slowdown. It was disappointing that single-player games would not take up the entire screen but this genre was, at the same time, new ground for Gremlin and it learned quickly (this issue was rectified in the sequel). Buoyed by the game's success, Gremlin went on to release many other driving games, *Super Cars* and Nigel Mansell's *World Championship Racing* being most notable.

Rainbow Islands

DEVELOPER: TAITO

YEAR: 1990 **GENRE:** PLATFORM

16 **As cute coin-op** conversions went, *Rainbow Islands* on the Amiga was as faithful as they come. The game perfectly replicated the classic platformer, ensuring baddies were splatted by colourful rainbows and and it became the first ever number one in *Amiga Power*'s All Time Top 100 list.

Hunter

DEVELOPER: TAITO

YEAR: 1995 **GENRE:** SHOOT-'EM-UP

15 **Activision's crudely-drawn** yet slick 3D epic allowed gamers to wander around a digital world, shooting people and choosing from more than 15 vehicles to drive and smash to pieces. If that sounds a tad like *Grand Theft Auto*, then it's little wonder – with hindsight, the two have been compared.

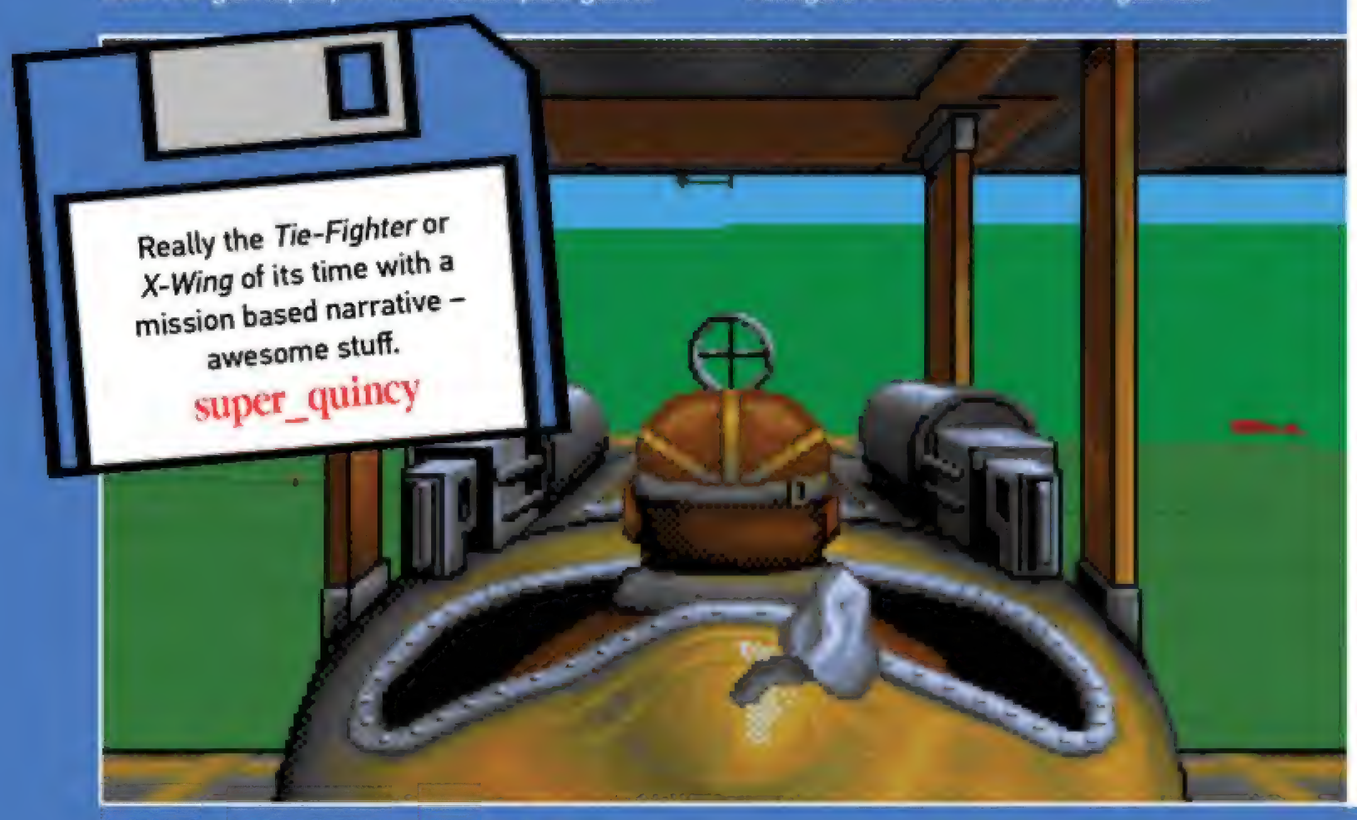
"It was good that the Amiga wasn't really a 3D machine. It forced you down one route, but you got excellent results"

Shaun Southern, coder on Lotus Esprit Turbo Challenge and Super Cars II

Wings

DEVELOPER: CINEMAWARE **YEAR:** 1990
GENRE: FLIGHT SIM, INTERACTIVE MOVIE

14 **With a Kickstarter** project having been successfully funded, Cinemaware is close to releasing a remastered version of this interactive movie/flight sim. Given the original game suffered from mass piracy back in 1990, the company deserves the extra cash injection from this latter-day classic but it is also great to see that the gameplay of the revamped game will be very similar to the original. Once again, players will be put in the cockpit of an SE5 biplane during the First World War and allowed to assume an alter ego. *Wings* required the completion of more than 230 missions over a two-year time period. It involved exciting dogfights as well as the absorption of lots of historical bits and bobs which lent much context to the proceedings. Some of the info could get a little tiresome but the overall package was well designed and proved a top-notch addition to the Amiga's exclusive roster of games.



Monkey Island 2: LeChuck's Revenge

DEVELOPER: LUCASARTS **YEAR:** 1991 **GENRE:** GRAPHIC ADVENTURE

13 **After the debut** of LucasArts' hilarious point-and-click classic had gone down so well with players, a sequel was inevitable and director Ron Gilbert ensured no one who bought *Monkey Island 2* was disappointed. Just opening the box and spotting an abundance of disks was enough to overawe most gamers but *MI2* was all about delivering more. There was more hair on Guybrush's face, more detail in the graphics, more humour and more silliness (check out the ending which prompted a flood of complaints). And as Guybrush set out to find the mysterious treasure of the Big Whoop, players could, for the first time in a point-and-click game, choose one of two difficulty modes. The sequel benefited from the debut use of LucasArts' new iMuse audio system.

The Chaos Engine

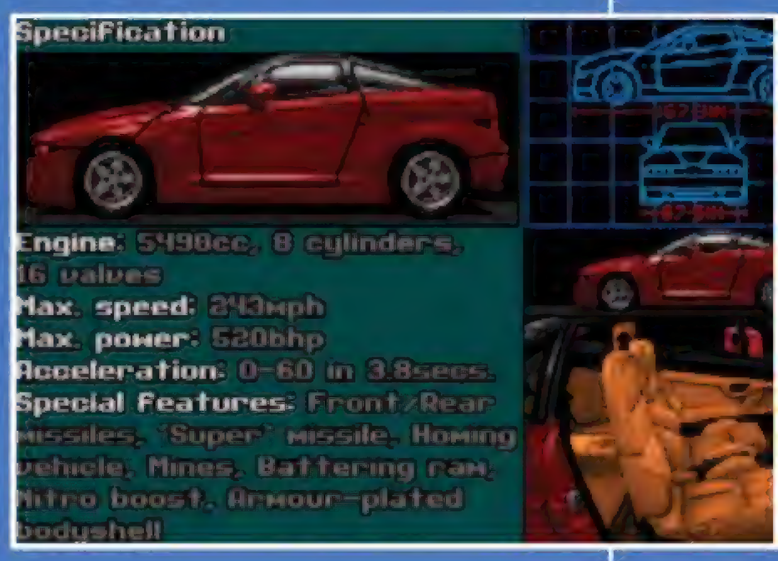
DEVELOPER: THE BITMAP BROTHERS
YEAR: 1993 **GENRE:** RUN-AND-GUN

12 **The Bitmap Brothers** had been marking its mark on the Amiga (and Atari ST) scene since 1987 and, having taken inspiration from a novel by William Gibson and Bruce Sterling called *The Difference Engine*, *The Chaos Engine* was a fine example of its later work. Players took their place in a group of six mercenaries keen to sort out the mess caused by a time traveller who, having found himself stranded in a late-17th Century steampunk England, had introduced new technology ahead of time and rewritten history. The result was an original top-down, run-and-gun game spread over four distinct worlds that was packed with puzzle elements including plenty of gold keys to open secret rooms, dynamite to destroy beetles and appearing bridges. As with most Bitmap games, the graphics were clean and well styled and the gameplay was accessible and addictive.

Super Cars II

DEVELOPER: MAGNETIC FIELDS
YEAR: 1991 **GENRE:** RACING

11 **Although Magnetic Fields** had proven itself more than capable of 3D-style racing games with *Lotus Esprit Turbo Challenge* (and had taken pole position as one of the world's best racing game developers for a spell), its release of the top-down racer *Super Cars* in the same year was attracting as much attention. *Super Cars II* was, therefore, inevitable and in sticking to a bird's eye view that had been a staple of many a racer throughout the previous decade, it not only retained fans of the first game but added so many more. Its lush graphics, blistering audio, weaponry, speed, exhaustive cornering and an emphasis on fun made it an essential Amiga purchase even for those who had bought the original. Much of this was due to its split-screen view for two-player head-to-heads and the three difficulty levels with seven tracks. The bizarre but brilliant cutscenes in which the player would be quizzed by various bodies, be it the police, a journalist or some other official person, also provided standout moments. Correct answers would boost the coffers needed for upgrades or get you extra championship points.



Kick Off 2

DEVELOPER: DINO DINI
YEAR: 1990 **GENRE:** SPORTS

10 **The original *Kick Off*** divided audiences upon its release in 1989, so it's not too surprising to see that it is the superior sequel that has made our readers' list. While that does put it behind *Sensible Soccer*, its main footballing rival at the turn of the Nineties, if *Kick Off* or its rather brilliant sequel had been left out of the top 25 altogether, it would have been extremely surprising.

With a bit of time spent learning the controls and understanding that the ball didn't stick to the players' feet (something that was, actually, very obvious from the off), patience paid off. If a friend had invested the same level of time in the game, then going head-to-head with a pal made for a rewarding experience, even if that experience was not altogether different from the first game. As a neat extra, use of an adapter would allow three or four players to get involved, with two gamers teaming up to play one team. This didn't work quite as well as perhaps Dino Dini would have liked but the effort was appreciated. It was tense as well, with the sudden death penalty shoot outs proving particularly nail-biting.

It appeared at times that Dino was packing the game with everything he would have liked from a football game. Players had great control and they could set time limits, skill levels, tactics and pitch types. They could even design the kit. There were eight international teams that could play in a league or a cup. While *Kick Off 2* wasn't going for extreme realism – there was no offside rule for a start – it felt like a high tempo English match. It emphasised keeping possession. This was achieved not by dribbling around a huge number of players but through passing and ensuring the ball edged up the field into scoring positions. As a result it proved extremely popular, with many considering it Dino Dini's finest hour. In aiming to replicate football's thrill and excitement, scoring in *Kick Off 2* felt like a genuine triumph and there is no doubt it was a winner.

MicroProse Formula One Grand Prix

DEVELOPER: MICROPROSE
YEAR: 1992 **GENRE:** RACING GAME

9 **With Gremlin/Magnetic** Fields going for all-out arcade action, MicroProse took a realistic approach to racing. Geoff Crammond spent months researching the look and feel of 16 real racetracks and the mechanics of F1 cars. The result was an accurate rendition of the sport that ran at an awesome speed. Unlike *Lotus Esprit Turbo Challenge*, the cars would sustain damage that would affect a race and mods would enhance or detract from the experience. The sheer level of detail, the need to put yourself through qualifying laps and the inclusion of proper tournaments set lofty new standards for racers.

Turrican II: The Final Fight

DEVELOPER: FACTOR 5
YEAR: 1991 **GENRE:** SHOOT-'EM-UP

8 **Vast is a word** often used to describe large games but *Turrican II* actually deserved such a description. Taking inspiration from a host of shoot-'em-ups and mixing them into one big pot, *Turrican II* had 1,500 screens broken down into 12 multi-directionally scrolling levels, each of which were full of hidden platforms, power-ups and traps. To keep gamers motivated (the game posed one tough challenge), the five worlds looked distinct from each other. It helped that gamers were able to approach the game in a gung-ho fashion or take a less mind-blowing approach by ducking away from the most fiendish of enemies. As long as the exit was found within a set time limit, the choice was that of the player. It was also, it must be said, a mapper's dream.

Sensible Soccer

DEVELOPER: SENSIBLE SOFTWARE
YEAR: 1992 **GENRE:** SPORTS

7 **At the turn** of the Nineties, the trend for football games had switched to a top-down approach thanks to the success of *Microprose Soccer* and *Kick Off*. It did not matter that they were not realistic renditions of the game, only that they played well. Duly noting this, Sensible Software, which had created *Microprose Soccer* and had spent much time with *Kick Off*, took the sprites from *Mega-Lo-Mania*, let them boot a ball around a pitch and created *Sensible Soccer*. With a one-button control scheme, a ball that wouldn't stick like glue to players, a top-down perspective that allowed a great view of the pitch, nine tournaments, 98 league and national sides and a cool aftertouch feature that controlled height and power, *Sensi* was a pure game of skill. In the first six weeks on sale it sold 43,000 copies...

"*Frontier* was special to me as it allowed me to greatly broaden what what *Elite* was about, adding the rich galaxy and the Cold War backstory"

Elite co-creator David Braben

Frontier: Elite II

■ **DEVELOPER:** FRONTIER DEVELOPMENTS
■ **YEAR:** 1993 ■ **GENRE:** SPACE TRADING

6 ***Elite* was an** 8-bit space-trading classic that regularly tops best game polls, but the 16-bit sequel that arrived nine years later won over fans of the Amiga. It had a huge gaming environment that no gamer could ever cover given that each of the 1 billion systems was up to 1.95 light years in diameter. This open-ended gameplay was the star attraction, though, picking up where the debut game left off, albeit on a much more powerful system. While it did contain bugs and suffered from poor frame rates on the A500, the game's colourful polygon graphics and engaging space battles brought great depth of play. Gamers could be who they wanted to be and do whatever they fancied doing in a game that had the potential to engross for months on end.

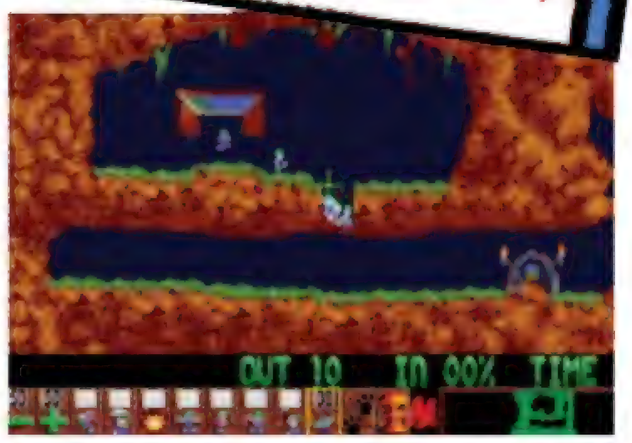
"Having come through the 8-bit era, all of a sudden we had machines that were almost super-computers by comparison – the Amiga was king of them all"

Lemmings artist Mike Dailly

Lemmings

■ **DEVELOPER:** DMA DESIGN
■ **YEAR:** 1991 ■ **GENRE:** PUZZLE

5 **While the Amiga** was blessed with many puzzle games, few came close to matching the mix of brainpower and reflexes needed to guide everyone's favourite tiny humanoid creatures to safety. The tight nature of *Lemmings*' design ensured gamers could use ingenuity and cunning to chart their own path through the levels. At the same time, players needed to make decisions regarding the number of lemmings they could sacrifice for the greater good – not always easy when the critters were as cute and personable as these. Amazing sound effects, which included the infamous 'oh no!' as the lemmings exploded in a shower of pixels, cemented the game's popularity. Around 55,000 copies were sold on the first day.



Sensible World Of Soccer

■ **DEVELOPER:** SENSIBLE SOFTWARE
■ **YEAR:** 1994 ■ **GENRE:** SPORTS

4 **Sensible Software's co-founder** Jon Hare has frequently bemoaned the glossy, TV-style presentation of modern football videogames. So in carrying the top-down view and tiny players of *Sensible Soccer* into the adored sequel *SWOS*, the developer showed itself to be unswayed by the emergence of the *FIFA* series of games. Instead, it took all that glittered with *Sensi* and turned it into gold, adding more teams and players, sprucing up the graphics and introducing a career mode that allowed players to manage a club of their choice.

Cannon Fodder

■ **DEVELOPER:** SENSIBLE SOFTWARE
■ **YEAR:** 1993 ■ **GENRE:** ACTION

3 **There is no** doubting that *Cannon Fodder* was a violent, complex game that was big on presentation even though its main characters were rather small. But at the same time, *Cannon Fodder* showed a level of maturity and daring that many other games would not have dared try. With soldiers screaming in agony and a jaunty title song that told the world 'War! Never been so much fun' was evidence of a game developed with tongues firmly stuck inside cheeks. So when the Royal British Legion called the game "sick and desperate" before its release and stopped Sensible Software from using the poppy on the cover, it was entirely wrong. *Cannon Fodder* showed the futility of war and this was evident throughout its 23 magnificent missions.

The Secret Of Monkey Island

■ **DEVELOPER:** LUCASFILM GAMES
■ **YEAR:** 1990 ■ **GENRE:** ACTION

2 **There is no** denying the impact *The Secret Of Monkey Island* had, not only on point-and-click adventure games but on gaming as a whole. It was the first point-and-clicker to have a full soundtrack and even the first to be turned into a live stage play (thanks to a performance in 2005) but it continued the tradition of *Maniac Mansion*, thanks to the success of the SCUMM scripting language that underpinned it. Players cared less for the mechanics, though, and instead lapped up the humorous dialogue, the graphics and the narrative. The sword duels were a battle of sharp wit rather than pointed metal and there were beautiful references to Lucasfilm adventures that preceded it. It all helped the game to win over a new, more mainstream audience and it is rather telling that only Lucasfilm Games adventures make the Amiga top 25. There is no room for Sierra's *Space Quest* nor *King's Quest*, it seems.

Speedball 2: Brutal Deluxe

DEVELOPER: BITMAP BROTHERS **YEAR:** 1990 **GENRE:** FUTURISTIC SPORTS

The Bitmap Brothers had a reputation for producing some of the Amiga's finest games and readers have pushed it into top position by deeming *Speedball 2: Brutal Deluxe* as the best title to have ever graced Commodore's 16-bit computer. As the name suggests, *Speedball 2* built upon the success of the *Speedball* (which was the London-based developer's second game) and it once again enthralled players with a fast-paced futuristic sports beat-'em-up.

While most sports games of this kind would concentrate purely on scoring goals, *Speedball 2* instead asked players to amass the most points, which was a departure from the first game. Goal scoring achieved some of those points but so too did bashing any of the opposing nine players or collecting any randomly appearing icons. This made for a violent and frantic game, with players having just 90 seconds in each half to make their mark. It was hard to keep the ball for too long so it was usually a case of catch and throw, the ball able to be flung in eight directions in the hope of landing with a teammate.

To make life a little harder, The Bitmap Brothers doubled the size of the playing area from the debut game. It also made it difficult for one team to truly run away with a game by introducing a score multiplier that would help a team falling behind to rapidly catch up and increase the tension yet again. Two-player games would benefit from two-legged matches. By collecting plenty of coins in the first leg, a team would gain an advantage in the second. Players would, therefore, give much thought to the best tactics to employ as the game went on. Smashing an opponent to pieces either through goals or brute force was not always the best way forward. Strategy ruled.

Speedball 2 really did have everything. The faster scrolling and management option (ensuring the team Brutal Deluxe was always on top form) were more than matched by enhanced sound which created a buzzing atmosphere and a sense of occasion. While the crowd was getting rowdy and taking up the offer of ice cream, the players would wince in pain and the commentator would lend an American sporting edge.

That was apt given the game was, in a sense, like a hyped up, harsher version of American Football, a sweat-'em-up as one pundit put it that had joysticks dripping and mouths drooling at the professional presentation and gorgeous graphics. You know a developer is on to something when you play a game that it supposedly set some years ahead of your current day yet it makes you yearn to travel in time to that point in the hope the sport has transcended into real life. Health and safety rules will most likely ensure that never happens but replaying this – or Tower Studios' smartphone/tablet version from 2011 – will always provide a current-day adrenaline rush.

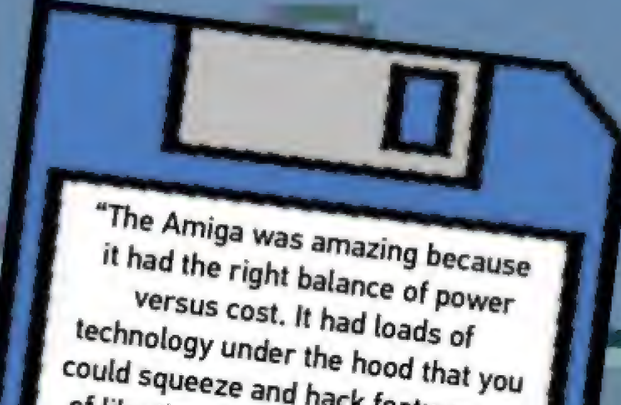
READERS' CHOICE

"The Amiga was amazing because it had the right balance of power versus cost. It had loads of technology under the hood that you could squeeze and hack features out of like the blitter and copper chips"

Peter Molyneux

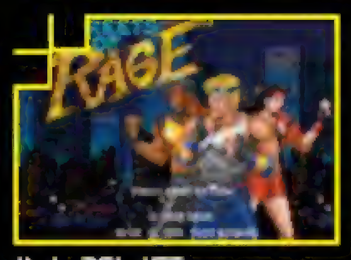
5 reasons why it's great

- The game's mechanics – bouncing the ball off walls, nine players per team – produced depth.
- The music was incredible thanks to the genius of Nation 12 that boasted former Ultravox singer John Foxx.
- Rules, what rules? In a game that is about scoring any way you can, there is no chance of the action letting up.
- It was violent. Sure, athletes bang on about fair play but there's a reason ice hockey is so popular.
- The game's smooth scrolling ensured players concentrated purely on the action.



STREETS OF RAGE

Artist Atsushi Seimiya explains how he helped create Sega's answer to Final Fight



IN THE KNOW

- **PUBLISHER:** SEGA
- **DEVELOPER:** SEGA AM7
- **RELEASED:** 1991
- **SYSTEM:** VARIOUS
- **GENRE:** BEAT-'EM-UP

It's hard to imagine today, but during the Eighties and Nineties, scrolling beat-'em-ups reigned supreme – particularly in arcades. Ever since Yoshihisa Kishimoto had perfected the formula with *Renegade* and the superb *Double Dragon* every other developer was eager to replicate the success, and many succeeded with their own long-running franchises.

Although Sega created several entertaining efforts during this time – *Altered Beast*, *Golden Axe* and *Alien Storm* – it was Capcom that truly ruled the genre, thanks to massively popular hits like *Dynasty Wars*, *Captain Commando and Final Fight*. The exploits of Haggar, Cody and Guy as they cleaned up the streets of Metro City turned into a big money spinner for Capcom, and *Final Fight* was soon licensed to numerous home computers, from the ZX Spectrum to Commodore's 16-bit Amiga. Nintendo quickly realised the popularity of Capcom's game, and locked it in as an early exclusive for its Super Nintendo.

Even though it lacked the cooperative play of the arcade original and was missing an entire level (the Industrial Area in case you're wondering), it still proved to be a huge success for Nintendo and Capcom – so much so that two exclusive sequels were released on the console. Sega in the meantime was relegated to the sidelines, forced to look helplessly on while one of the arcade's most popular games was playing on its rival's console. History would reveal that an arguably better port of the popular beat-'em-up would eventually appear on Sega's very own Mega-CD, but that debut was still years off and Sega couldn't predict the future. It needed a game that would beat Nintendo's popular exclusive and it needed it now.

» [Mega Drive] Here are your three main heroes. We're personally big fans of Blaze Fielding.

The answer of course was to simply make its own game that did everything *Final Fight* did and more. That answer came in the form of *Streets Of Rage*, which debuted on Sega's Mega Drive in August 1991, some nine months after *Final Fight*'s successful SNES release. **Retro Gamer** was fortunate enough to speak with Atsushi Seimiya about his work on the iconic scrolling beat-'em-up. Currently he's the manager of AM R&D1, but during the creation of *Streets Of Rage* (or *Bare Knuckle* as it was known in Japan) he worked as an artist. The first question we asked was whether *Streets Of Rage* was always planned as Sega's answer to the popular SNES exclusive. "I cannot deny that it was not," is his honest reply. "Actually we bought a machine and studied it a lot as a team."

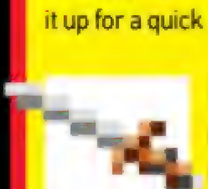
The team's close scrutiny of Capcom's game paid off. While it's not quite as slick as Capcom's original arcade release, it easily offered

» [Mega Drive] Playing with a friend adds a second boss to the end of each stage. Just to keep things challenging.

» Here's a look at the Western and Japanese box art. We'd argue that *Bare Knuckle* is a much cooler name.

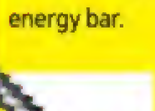
POWER-UP!

Take on the gangs with these handy items



BOTTLE
■ You'll only get a few hits with this weapon so try to use it sparingly.

APPLE
■ Take a bite out of this apple and receive a quarter of your energy bar back.

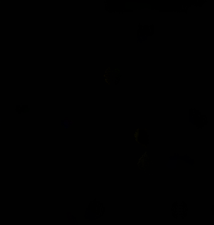


PEPPER SHAKER
■ Chuck it at an enemy then rip him apart while he's having a sneezing fit.

1-UP
■ It's tough on the streets, so pick this up in order to net yourself a handy extra life.

LEAD PIPE
■ Has the best reach by far in the game, but is quite slow and clunky to use.

CASH BAG
■ Thugs just leave their money lying around, so pick it up for a quick 1,000 points.



KNIFE
■ A fast weapon that deals high damage, it can also be hurled at enemies.

BEEF
■ This handy slab of meat replenishes your entire energy bar.

BASEBALL BAT
■ While it doesn't have the insane reach of the lead pipe, it's a lot quicker.

SPECIAL
■ Want some extra attack power? Then summon an extra police car with this.

GOLD BARS
■ Suitably rare, which is hardly surprising as they reward you with a hefty 5,000 points.

DEVELOPER HIGHLIGHTS

PHANTASY STAR
SYSTEM: MASTER SYSTEM
YEAR: 1987

SAKURA TAISEN
SYSTEM: SATURN
YEAR: 1996

NIGHTSHADE (PICTURED)
SYSTEM: PLAYSTATION 2
YEAR: 2003

» [Mega Drive] Each player has a unique special weapon attack. This one is by far the coolest.

» [Mega Drive] *Streets Of Rage* has an industrial stage. Take that SNES *Final Fight* fans.

plenty of benefits over the SNES port, most notably the fact that you could play with a friend, boosting the enjoyment of the game. Sega's game allowed you to choose from three brawlers who had all been slighted by nemesis Mr X, who controlled the city and even its police force. Like *Final Fight* each character is unique, each with their own strengths and weaknesses. Adam Hunter is clearly based on Haggar, being a slower, but heavier-hitting character, able to make mincemeat of groups. Blaze Fielding on the other hand plays more like Guy, being far quicker than her two male counterparts, but unable to take heavy hits. The last character is Axel Blaze, the everyman of the group who has Cody's all-round abilities but is hampered by a slightly weaker jump than his two companions. All three are ex-police, and have sworn to bring Mr X to justice.

We were keen to know the involvement that Seimiya had during the game's production. "As an artist, I worked on a wide range, from the player character, terrain, and the Boss, etc," he explains. "It was my first time working on the player character, so I had to go through a bunch of re-takes." It may have been a baptism of fire for the young artist, but the constant redesigns certainly paid off. Like *Final Fight*, *Streets Of Rage* has an interesting mix of gritty urban environments and cartoon-like characters. Many of the levels are quite similar to Capcom's game, with locations based on downtown streets and industrial areas. The variety is expanded with the addition of lovely stretches of beach, an exhilarating lift ride (no scrolling beat-'em-up is complete without one) and the final arduous trek through a corridor that leads to Mr X's penthouse, which effectively doubles as a boss rush for all the previous bosses. Unsurprisingly there was little originality to *Streets Of Rage*'s look with Seimiya admitting that Sega was simply delivering what it believed the public wanted. "*Final Fight, Double Dragon*... many arcade games back then were using the realistic game settings, and I think it was simply a trend," admits Seimiya.

It may have looked very similar to some of the more popular brawlers of the time, but Sega's game still managed to stand apart thanks to its varied locations, interesting level design and challenging bosses. It also boasted a menagerie of interesting enemies and bosses that came in a variety of shapes and sizes. In addition to the usual street thugs, there were guys who looked like rejects from *Teenage Mutant Ninja Turtles*, dominatrixes with vicious whips, crazy-haired planks juggling axes and flaming torches and well-dressed martial artists.

And then there were the bosses, a weird selection of mayors that ranged from claw-wielding maniacs to wrestlers that looked like the Ultimate Warrior's lost brother. Other memorable bosses were a giant fire-breathing fat man, and Mona and Lisa, two female adversaries who were effectively more powerful palette swaps of Blaze Fielding. Seimiya found himself working on both the enemies and the bosses, a task he found quite rewarding. "The design team would give me a request with the background story of the character, dot size, and reference materials for actions," he recalls. "I created the characters based on those kind of materials. It was challenging to come up with how to animate characters with a limited number of dot images."

While we were discussing the various bosses of the game an interesting piece of information came up. While Seimiya was reluctant to share his favourite creation with us, he did reveal the following about the rather unimpressive pair of bosses found on level 5. "I do not remember all the details, but there was a special boss for stage 5 instead of Mona and Lisa," he recalls. Maybe one day

» [Mega Drive] There are a variety of weapons in the game. Use them wisely as they have limited uses.

» [Mega Drive] The music on this stage is incredible. It's a pity you can't hear it. It's really good. Honest!

BOSS RUSH

The mayors of Streets Of Rage and how to defeat them

ANTONIO

■ Boss number one is pretty straightforward. Dodge the arc of his giant boomerang and move in for a flurry of punches of throws. Just be wary of his powerful kick that has quite an impressive reach.

DIFFICULTY

SOUTHERN

■ We hate this guy. His claws take huge amounts of energy off you and he's fast. Your best bet is to try and sneak up to him and deliver groin kicks. Don't jump near him.

DIFFICULTY

ABADEDE

■ He may look like the Ultimate Warrior, but there's nothing ultimate about this easy boss. While his punch is extremely powerful you can see easily see it coming. Simply sidestep him and unload your fury until his knees buckle.

DIFFICULTY

we'll find out what that boss was supposed to look like, but it at least explains why the two female fighters lacked the imagination found within the rest of the boss gallery.

Although *Streets Of Rage*'s bosses were tough, the three main characters were more than equipped to deal with them. All three had access to a flurry of kicks and punches and were also able to pull off flying kicks and use handy back attacks. Nothing revolutionary compared to what had come before it, but the controls were tight and responsive, meaning you always felt in control of the fighting. While enemies could grab and throw you, you were far from defenceless, being able to land on your feet with a well-timed press of the jump button and even attack enemies while you were being held. You could even team up with your fellow fighter to pull off trickier moves, while pressing A summoned a police car that fired a rocket that killed off most enemies. Sadly, Seimiya didn't have much involvement with the fighting mechanics, simply telling us: "I was pleased with the tag-moves which rewarded users to co-op with a friend."

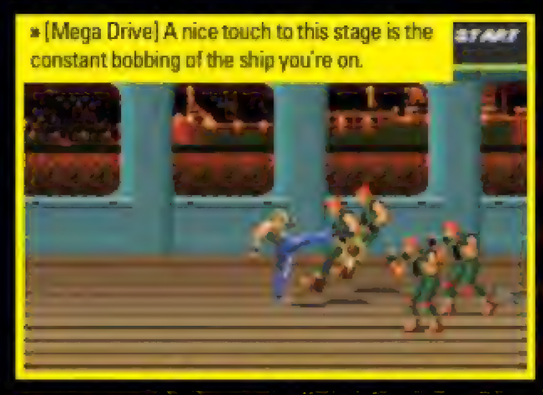
Another aspect of the game that Seimiya was a fan of was *Streets Of Rage*'s scintillating soundtrack. While many will argue that the best tunes are found in the second game, it's still impossible to play the original without whistling or tapping your foot to the techno-infused tunes, as they perfectly complement the frantic on-screen battles. "[The music] was very important, and thus we used Yuzo Koshiro for the score," admits Seimiya, "as we did for the last game." The game he's talking about is *The Revenge Of Shinobi*, a rather superb sequel that married the arcade shenanigans of the original game to Koshiro's eclectic and bombastic score. There were additional connections to *The Revenge Of Shinobi*, as *Streets Of Rage*'s director Noriyoshi Ohba had overseen *Shinobi* as well.

In fact Seimiya feels that Ohba's directorial style is what led to *Streets Of Rage*'s unusual multiple endings, one of which gives you the option of teaming up with Mr X instead of trying to defeat him, telling us: "I guess it was his style to add a bit of spice to the script." We also discovered that *Streets Of Rage* was basically complete from a gameplay perspective. The finished release is exactly what Sega planned to make. "There were lot of assets that did not end up in the final game," admits Seimiya, "but features were all built in the final game."

Streets Of Rage's release saw it receiving critical acclaim from journalists and strong sales. Its success on Sega's 16-bit console saw a cut-down version appear on the Game Gear in 1992 that lacked Adam as a playable character and a PAL-only Master System release in 1993 that dropped the co-op play. We were keen to know if Seimiya had any involvement with these inferior ports, only to be told: "No, I did not take part in those projects". The original Mega Drive version has popped up in various guises since, with one of the most impressive being M2's 3DS version, which creates a 3D playing area for the game, adding a scale of depth to proceedings.

While *Streets Of Rage* was a big success for Sega, it was the sequel, released in 1992 that really made gamers take notice of the franchise. Everything about it was bigger and better, from its incredible music compositions – again by Yuzo Koshiro – to its beefier sprites and larger range of combat moves. In fact, many still regard it as the pinnacle of the genre. Seimiya worked on the sequel as a background artist. He was also involved with 1994's *Street Of Rage 3*, infamous for its boxing kangaroo and the large amount of changes that were made between the Western and Eastern versions of the game. There was even a comic series, but again, Seimiya had nothing to do with it.

Although usurped by its superior sequel, *Streets Of Rage* remains an entertaining brawler and an important release in Sega's 16-bit battle against Nintendo. It's a pity then that, the odd update aside, Sega has done very little with the franchise since its 16-bit glory days.



» [Mega Drive] A nice touch to this stage is the constant bobbing of the ship you're on.

» [Mega Drive] This ending only appears if one of you agrees to join Mr X in two-player mode.

"Many arcade games back then were realistic, and I think it was simply a trend"
Atsushi Seimiya

BIG BEN

■ A really frustrating boss, mainly because of the huge gout of flame he breathes, which is difficult to avoid. Be as quick as you can, get in close and hit hard. Do not try and throw him though as he'll crash and damage you.

DIFFICULTY

MONA & LISA

■ These two beauties are incredibly frustrating to battle. Keeping on the move and using your back attack is your best chance of success. Alternatively grab them and keep hold of them for as long as possible, or use flying kicks.

DIFFICULTY

MR X

■ A suitably tough boss for the finale due to his quick rushes and the insane reach of his machine gun – that's right, he has a bloody big machine gun. Keep on him, hit hard and fast and keep an eye out for his numerous, hard-hitting minions.

DIFFICULTY

Future Classic

Modern games you'll still be playing in years to come

INFO

- **Featured System:** Xbox 360
- **Year:** 2011
- **Publisher:** Bandai Namco
- **Developer:** From Software
- **Key People:** Hidetaka Miyazaki – director, Producer, Jun Ito – lead programmer, Motoi Sakuraba – composer

GO DEEPER

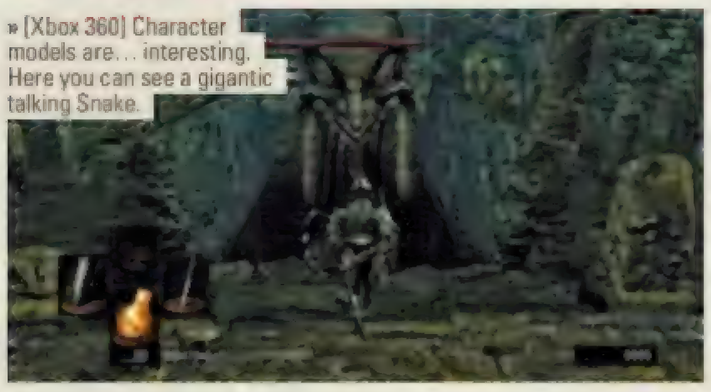
- One of the starting gifts you can choose, the Pendant, is utterly useless.
- While *Dark Souls II* had different directors, Miyazaki is back on the upcoming *Bloodborne*.

44.

» [Xbox 360] Beat this boss and the next time you show up, two of them will be waiting for you. That's classic *Dark Souls*.

DARK SOULS

Are you prepared to die? Sam Smith dives into the cursed land of Lordran and lives to tell the tale, and you should too



» [Xbox 360] Character models are... interesting. Here you can see a gigantic talking Snake.

THE BACKGROUND

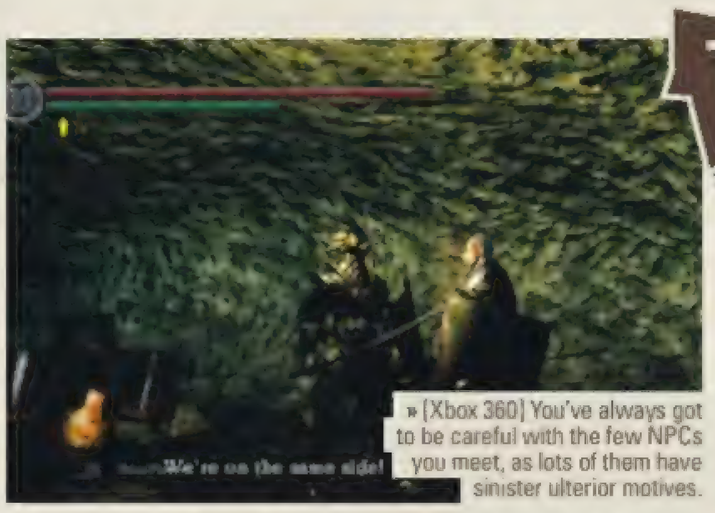
From Software had been trucking along for years before *Demon's Souls*. A workhorse studio, it pumped out mediocre to average games across all genres, from the mecha *Armored Core* series to the first-person, rock-hard RPG *King's Field* games. It was this series that inspired *Demon's Souls*, a PlayStation 3 exclusive that was released to little fanfare in 2009 – indeed, Sony decided against publishing the game outside of Japan, leaving it up to third parties. It was a misguided decision in hindsight, as *Demon's Souls* was a success with critics and gamers, a blend of the hardcore trappings of *King's Field* with a new style of action-RPG gameplay spearheaded by director Hidetaka Miyazaki.

Work soon began on a sequel, although not one directly connected to the story and world of the first game. Miyazaki returned as director and producer, refining the basic gameplay and ideas of *Demon's Souls* and introducing them to a new audience on Xbox 360. Many UK PlayStation 3 owners had also missed out on *Demon's Souls* due to the European release taking many months longer than the American, so for many *Dark Souls* was their first step into this strange new challenge.

THE GAME

That's the thing that everybody remembers about the *Souls* games, the first thing that gets brought up in conversation: the difficulty. Most readers of this magazine will agree that games today are too easy, holding your hand every step of the way and rarely testing the skills that you've built up over decades of sitting in front of a screen and pressing buttons. *Dark Souls* says to hell with that, and aside from an incredibly sparse few lines of tutorial text telling you what the buttons do, you are on your own. *Dark Souls* laughs at the concept of objective markers, and outside of some extremely vague and veiled hints from NPCs, you will have to explore and make your own way in this world. Add in the fact that there is no map, and you have to scour, learn and memorise every corner of Lordran like the good old days when we drew pen-and-paper maps of the original *Metroid*.

» [Xbox 360] The horrific creature in the background is actually one of your only friends… or is it?



» [Xbox 360] You've always got to be careful with the few NPCs you meet, as lots of them have sinister ulterior motives.

Lordran is a bleak, empty land, populated only by mindless undead and horrific demons all looking to kill you. *Dark Souls* is defined by its simple but wonderfully responsive combat, where each button press corresponds to a swing of your weapon and carefully observing your enemy and attacking when able is the only sure-fire route to success. Swinging wildly will quickly get you killed, even against the most basic of enemies. Every fight is a threat in *Dark Souls*, and you need to be attentive and focused at all times.

Of course, death is inevitable, and the game's approach to it is another one of its elements of genius. Die and you'll be sent back to the last bonfire you rested at, a checkpoint system of sorts. Resting at a fire refills your health and Estus Flasks (health potions, essentially) but also respawns every single enemy in the world, aside from defeated bosses. You can't clear out an area and be done with it – every time you rest, the bad guys come back. Die and respawn, and your collected souls will be left at the spot you perished. Souls act as currency and experience, spent on items and to level up, and losing a huge batch is never fun. You have one chance to get back to your corpse and get your souls back, but die again before you do and they are gone forever. It's a brilliant mixture of risk and reward that always leads to extremely tense moments. But lots of games are hard, and a lot of games play well. *Dark Souls* is exceptional because of its artistic elements: the atmosphere, the lore and story hidden in the world, the stark beauty of a landscape housing a dead society. Few games have ever created a feeling of isolation and loneliness like *Dark Souls* (again, inviting comparisons to *Metroid*). The story of the world you venture through is left largely unexplained, but hinted at through various means, be it item descriptions or the mutterings of a deranged merchant. This minimalistic approach to storytelling adds to the mysterious nature of the game, and dedicated fans have managed to discern a huge amount of lore and backstory from the subtle hints given – just like the rest of the gameplay, if you want to know what's going on, you have to work for it.

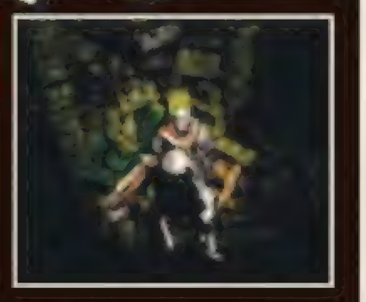
WHY IT'S A FUTURE CLASSIC

This is the real reason why *Dark Souls* will live on, sure to be remembered in decades to come. Most games feel like entertainment, *Dark Souls* feels like a piece of art, fully conceptualised by Miyazaki and his team as a whole, designed to function both as a great game and a means of conveying emotion, bringing a player down through isolation and failure before building them back up as they learn, grow and get better. Some won't have the patience for a game like *Dark Souls*, and that's fine – it's not for everyone. But for those with the patience and fortitude to persevere, those that see games as challenges to be explored, mastered and conquered, *Dark Souls* is a true modern classic in every sense of the word. ★

Things of note

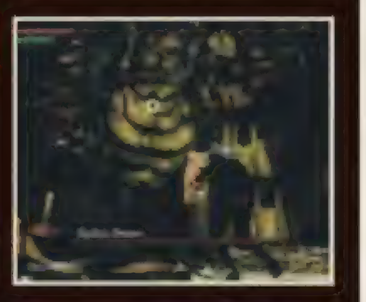
THE UNDEAD ASYLUM

The tutorial area of sorts, the Undead Asylum is a memorable opening to your adventures. Make sure to come back later…



THE BOSSES

The best bits of *Dark Souls* are the terrifying battles against deadly bosses. One moment of lapsed concentration is all it takes to bite the dust.



FIRELINK SHRINE

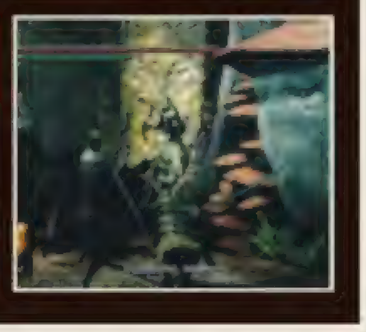
Firelink Shrine acts as your base of operations and is one of the few safe places. You'll come here often, and learn to love the soothing music – it means you can finally relax.

MULTIPLAYER

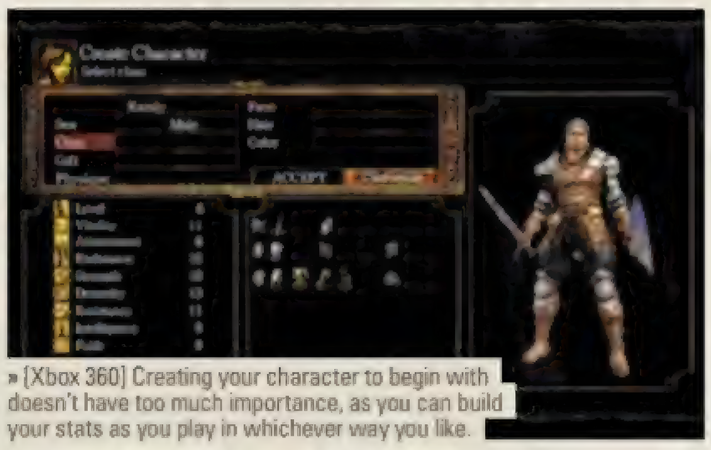
Dark Souls has an interesting and unique online system. Other players can be summoned to help, but can also invade your game and try to kill you!

ARTORIAS OF THE ABYSS

Bonus content in the PC port, this extra content was added as DLC to the console versions. It's an excellent addition well worth playing.



» [Xbox 360] The white light signifies either a boss or entry into a new area. Either way, passing through it is always scary. What's on the other side?



» [Xbox 360] Creating your character to begin with doesn't have too much importance, as you can build your stats as you play in whichever way you like.

» [Xbox 360] Get used to this screen – you'll be seeing it a lot.

THE Bluffer's guide TO

TURN-BASED STRATEGY

As one of the longest running genres in videogaming history, turn-based strategy has covered all sorts of themes, gameplay styles and even platforms. Adam Barnes takes a look at the tumultuous rise and fall of the thinking man's game

Way before your Commodores and your Ataris, even before *Pong* and those massive mainframe machines, turn-based strategy had already earned the glory of being the biggest gaming genre around – even if, perhaps, no one knew it. Predating even motorised vehicles, gamers around the world were taking turns to move checkers, pawns and other pieces across grids in a bid to outwit their opponents. Chess, for example, is one of the oldest and most reputed strategy games around, and for one simple reason. As we'd later find out with the best of the genre in videogames, chess offered (and still does, of course) a rich depth that its players could learn and – ultimately – master, to then use those skills to defeat others. It only made sense, then, that with the advent of computers strategy gaming would be changed forever.

It began in the universities, initially. Mainframe computers housed in some of the most prestigious education facilities around the world were something of a revelation, but it took one man – Walter Bright – before we saw what is widely considered the first turn-based strategy game. Built in 1977 (but not 'properly' released until 1987) on a PDP-10 mainframe computer at Caltech University, Walter's game (which would later become known as *Empire*) was as rudimentary as you might expect a game of its time to be. It shared untold similarities with the popular board game *Risk*, but all the same it inspired young developers that got their hands on it to realise the true depth and possibility of computer games. It wasn't until 1982 when Don Daglow – who had similar experience with the PDP-10 mainframes at his own university, Pomona College in California – helped create *Utopia* for ▶

KNOW YOUR TURN-BASED STRATEGY

4X

■ Explore, expand, exploit and exterminate are the four 'X's, and often this means amassing an army, spreading your borders and destroying your enemies.

TACTICS

■ Later spun-off into a branch of RPGs, tactics strategy is reliant on positioning of individual units – the strategy coming from savvy unit placement.

CCG

■ Collectible Card Game. These aren't as commonly known as turn-based strategy games, but their core gameplay ticks all the right boxes.

ARTILLERY GAME

■ Made popular by the *Worms* series, the strategy here comes in clever positioning to survive attacks from your opponent in the next turn.

TIMED TURNS

■ Some turn-based strategy games also enforce a time limit for your actions per turn to ensure gameplay is kept quicker, particular in multiplayer-driven titles.

GRAND STRATEGY

■ As you might expect, this focuses more on scale of proceedings. Often you'll span multiple countries, with your tasks managing army movement and resources.

GRID/HEX

■ The most common means of limiting unit positions, some opt for grid-based position while others choose to go for a series of interlocking hexes.

» [NES] It was tricky to follow *Nobunaga's Ambition* with its crude visuals, but the sheer wealth and depth of its mechanics were unmatched at the time.

▶ Mattel's Intellivision that we saw the first retail release of a turn-based strategy game. In truth the game was never really intended to amount to much, with Don tasked simply to create something 'different' alongside Mattel's otherwise safe roster of sports games and arcade conversions.

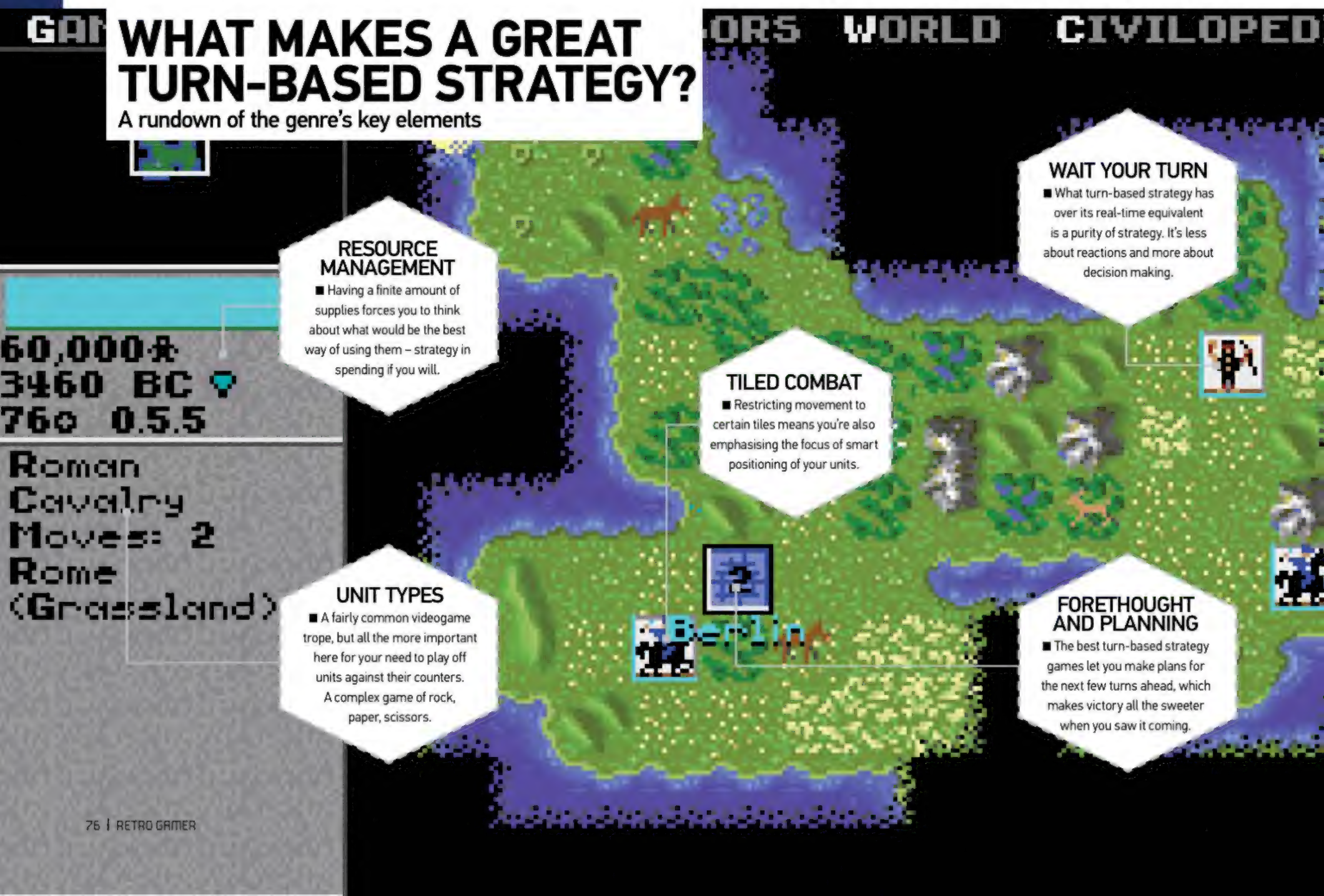
"Since I had a lot of design experience I kind of got thrown that challenge," says Don of his job to make something new for the Intellivision, "and so that's when I started thinking about how we didn't have anything that was like a sim and sims were such a common part of the pre-industry games scene I thought 'hey, I'll do that'." Despite the low expectations for *Utopia* – Don and Mattel expected it to be little more than "a nice line-filler" – the game ended up being the biggest hit of CES in January of '82 and led to respectable sales for the system. Where many turn-based strategy games of the time focused on elements found in board games, *Utopia* differed and, in many ways, was ahead of its time. A scoring system was implemented to rate how appeased your island's inhabitants were, an intricate AI simulation beneath the player's instructions led to realistic reactions from your decisions and – most innovative of all – it focused as much on combat as it did resource management, a precursor to the turn-based strategy subgenre that would later be coined 4X.

Unsurprisingly, considering the genre's heritage in board games, many turn-based strategy games of the time focused on combat. Yet 1983 saw a selection of new games in the genre of varying success, each with their own unique spin on tried-and-tested expectations. *Archon: The Light And The Dark* was Electronic Arts' first foray into strategy, which had more than obvious inspiration from chess if not for the fact that combat decided whether a unit could take control of a tile. *Artillery Duel* formed the basis for the subgenre of artillery game, popularised by the likes of Team17's *Worms*. Then there was *Reach For The Stars*, the first sci-fi themed 4X game. It was Ozark Softscape's *MULE* that was most interesting, however, forgoing combat entirely for a series of timed turns that required managing resources in a multiplayer economic race. *MULE* proved that strategy didn't necessarily have to be about war; here the different stores of supplies had an effect on your ability to complete actions. Food, for example, maintained your MULE's time allotted per turn while limited stocks of energy or smithore restricted your ability to manufacture and advance your own supplies. It was a game devoted to economics, driven by supply and demand rather than brute force. Over in Japan, however, was Koei's *Nobunaga's Ambition*, a hex-based strategy game that would set the foundations for what would later become known as grand strategy, a subgenre encapsulated by the likes of Paradox Interactive's *Europa Universalis* and *Crusader Kings*.

By the end of 1983 turn-based strategy had already split itself neatly into distinct flavours. The innovation of this

WHAT MAKES A GREAT TURN-BASED STRATEGY?

A rundown of the genre's key elements



RESOURCE MANAGEMENT

■ Having a finite amount of supplies forces you to think about what would be the best way of using them – strategy in spending if you will.

WAIT YOUR TURN

■ What turn-based strategy has over its real-time equivalent is a purity of strategy. It's less about reactions and more about decision making.

TILED COMBAT

■ Restricting movement to certain tiles means you're also emphasising the focus of smart positioning of your units.

UNIT TYPES

■ A fairly common videogame trope, but all the more important here for your need to play off units against their counters. A complex game of rock, paper, scissors.

FORETHOUGHT AND PLANNING

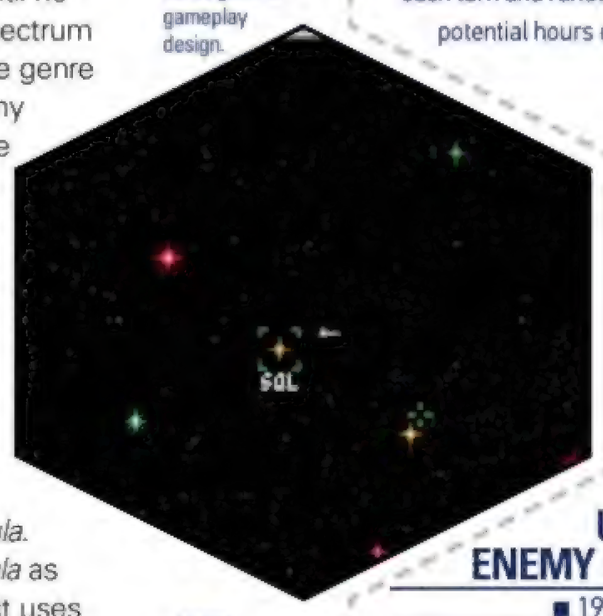
■ The best turn-based strategy games let you make plans for the next few turns ahead, which makes victory all the sweeter when you saw it coming.

FIVE ESSENTIAL GAMES

With a genre spanning such a variety of titles, topics, themes and even gameplay styles, what are the ones that matter the most?

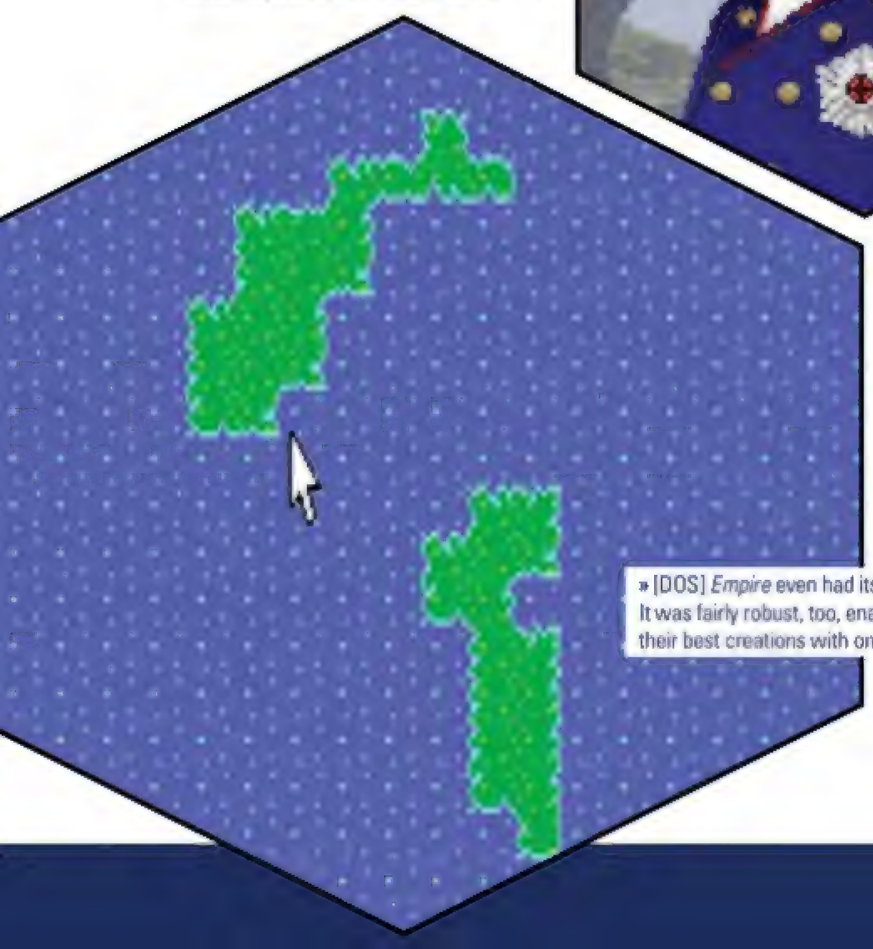
early era didn't stop there, though, when in 1984 Julian Gollop – a name now famed within the genre – began his career in earnest. Though he had experience developing strategy games during his studies, it wasn't until he released *Nebula* for the ZX Spectrum in 1984 that his passion for the genre really blossomed. As with many strategy developers of his time Julian's interests had initially begun with board games, but that didn't mean he tackled these early computer games in the same fashion. "I saw them as an evolution of board games," Julian tells us of his first steps into videogame development, and how he approached *Nebula*. "You couldn't really play *Nebula* as a board game really, because it uses some algorithms which relied on simple maths, but the computer made it a lot easier. The computer did the calculations for you. So you wouldn't really be able to play it as a board game, it would be too cumbersome. And also it did have an AI, so you could play it single-player which, again, for board games is not so easy. It was kind of an evolution from board games."

Julian's *Nebula* wasn't particularly well received, but undeterred and eager he then released *Rebelstar Raiders*, also in 1984 and



» [DOS] Most space exploration 4X games owe some kind of credence to *Master Of Orion* for its general gameplay design.

» [DOS] Interacting with other leaders was fantastically well handled in the original *Civ*. Admittedly it hasn't evolved much since.



» [DOS] *Empire* even had its own map editor. It was fairly robust, too, enabling fans to play their best creations with one another.

CIVILIZATION

■ 1991 ■ DOS

Sid Meier's take on the 4X genre is perhaps the best known turn-based strategy game, and with its original concept – of taking a nation from its birth to the modern age – that's hardly a surprise. The string of important decisions each turn and randomised worlds means the potential hours of playtime is endless.

NOBUNAGA'S AMBITION

■ 1983 ■ NES

As the longest running franchise in the genre, Koei's *Nobunaga's Ambition* has defied logic. It was the first turn-based strategy game to use hexes instead of grids, and even gave birth to grand strategy – as seen with its focus on taxes and fief management. Its popularity was heavily restricted to Japan, however.

UFO: ENEMY UNKNOWN

■ 1993 ■ DOS

Julian Gollop's impact on the genre has been palpable, but *UFO: Enemy Unknown* – or *X-COM* – is perhaps his most important release. Its combination of strategic level resource management and more tactics-based combat missions provided a mechanical reason to adore it, but its difficulty even evoked emotional responses too.

ADVANCE WARS

■ 2001 ■ GBA

Advance Wars managed what so few turn-based strategy games had attempted to do: draw in a mainstream audience. Though its gameplay wasn't particularly original by the time of its 2001 release, it was more accessible, more appealing and more portable than any turn-based strategy game before it.

HEROES OF MIGHT & MAGIC

■ 1995 ■ DOS

While not as reputed as *Civilization*, *Heroes Of Might & Magic* provided its own fantastical spin on the 4X genre by implementing tactical combat screens. It has, arguably, spawned more copycats than *Civilization* due to its multiplayer appeal – but none have managed to top it yet.

Bluffer's guide

DID YOU KNOW?

1 The first turn-based strategy games were designed on huge mainframe computers, with many later being ported over to other formats for commercial releases.

2 *Utopia* was the first commercial release of a turn-based strategy game, designed by Don Daglow for Mattel's Intellivision. It had a complex AI that simulated life on an island.

3 Japan's first entry into the turn-based strategy genre was *Nobunaga's Ambition*, a complex grand strategy game that has survived until the modern day – its latest release was on PS4.

4 Julian Gollop was responsible for a large portion of the genre's earliest games, with the likes of *Chaos*, *Rebelstar* and *Laser Squad* all finding various forms of success.

5 Though *Heroes Of Might & Magic* was the first to approach 4X gameplay with an element of RPG, it has become the de facto name when describing its very particular game design.

6 *Battle Isle* utilised the very same approach to combat and strategy that we saw in later years with *Advance Wars*, but few recognise the game as being ahead of its time.

7 After leaving EA for MicroProse, famed developer Daniel Bunten (later Danielle Bunten) was due to develop *Civilization* before he was convinced by Sid Meier to work on a version of board game *Axis And Allies* instead.

8 The term 4X was first coined in a preview for *Master Of Orion*, before earning common usage years later. It stands for 'Explore, Expand, Exploit and Exterminate'.

9 *X-COM* was born out of Gollop's interest in various sci-fi fiction at the time, but the core mechanics were first conceived in the squad-based combat of *Laser Squad*.

10 Though not officially titled with Sid Meier's name, *Civilization* is the only series to continue the trend of putting his brand on the packaging – even to this day.

» [PC] The success and innovation of *Civ III* was a turning point for the genre, that sadly never amounted to much. It's been tired sequels and rereleases since.

also on the ZX Spectrum. The squad-based strategy game – often known as 'tactics' strategy – was a whole new approach to the genre, but excluded a single-player mode with the game, choosing instead to favour the ever-so-sweet feeling of defeating a human opponent. It has long been a mainstay for the genre, but even early on it became necessary to include a single-player equivalent to play against. Julian then released *Chaos* in 1985 and begun work on *Rebelstar* – which saw a release in 1986. While speaking with Telecomsoft with hopes to get *Rebelstar* published on its Firebird label, Julian discovered the publisher-driven need to include AI with strategy games. "I was hoping it would be published without a single-player version," says Julian, adding that Telecomsoft insisted AI was added to *Rebelstar*. "They said 'no, look – for it to have any commercial viability we need for it to have a single-player version'. I was very pleased that I made the effort to solve that problem because I think it did contribute to the appeal of the game, I'm sure." Julian admits that gaming at the time was, by and large, the bastion of the solitary, and that a single-player mode was a necessity to succeed in the market. "If it was only two-player I don't think it would have been anywhere near as successful. It is important, because that was the way that most people were playing computer games – which was on their own, whatever it was."

> **"I was hoping it would be published without a single-player version"**
> Julian Gollop

It was these earlier years that proved to be the most formative for the genre. While the big-name titles had yet to appear, the many branches of turn-based strategy owed itself to these very early years. The following couple of years rattled on, with Koei releasing a sequel to *Nobunaga's Ambition* and three other turn-based strategy games: *Genghis Khan* (1987), *Bandit Kings Of Ancient China* (1988) and *L'Empereur* (1989). Elsewhere we saw more from Julian – who was already earning a name for himself – with sequels to *Rebelstar* and all-new

SELECTED TIMELINE

1977 – PDP-10 AND THE FIRST STRATEGY GAMES
■ Simulation – as strategy was referred to as back then – was a large part of games development on the mainframe computers, in particular the PDP-10 machines.

1982 – UTOPIA
■ Inspired by the simulation games prior to the games industry's first boom, Don Daglow's *Utopia* for Intellivision paved the way for strategy games.

1983 – MULE
■ One of the first turn-based strategy games designed around economy and resource management instead of combat, *MULE* stands apart among its peers.

1984 – NOBUNAGA'S AMBITION
■ One of the first hex-based turn-based strategy games, and considered to be the first example of 'grand strategy' outside of the board game *Risk*.

1985
1986

1987 – REBELSTAR RAIDERS
■ A two-player only turn-based strategy game, *Rebelstar Raiders* placed importance on unit positioning rather than overall resource usage.

1987 – EMPIRE: WARGAME OF THE CENTURY
■ The turn-based strategy game that inspired so many in the mainframe computer era is finally released on home consoles, DOS and Apple II.

1988 – THE RISE OF MS-DOS
■ It's hard to pinpoint exactly when turn-based strategy began to favour mouse and keyboard but it was a clear shift thanks to the interface requirements these games often had.

1988 – LASER SQUAD
■ *Laser Squad* encapsulated everything of Julian Gollop's earlier work, but was most important for setting the foundation for *X-COM* years later.

1989

title *Laser Squad*, which would one day inspire one of the most beloved turn-based strategy games. After early work on RPG *Might & Magic*, New World Computing released its first turn-based strategy in 1989, *Nuclear War*. Released first on the Commodore Amiga and then later for PC, *Nuclear War* was a satire of all-out global nuclear destruction. With comical caricatures of political figures, ironic 'victory' screens and gameplay that focused entirely on launching more missiles than your opposition, *Nuclear War* offered something completely new for the genre. Then came New World Computing's *King's Bounty*, an early 4X game that had two modes of gameplay: an overworld movement screen where the player controlled a hero unit and turn-based, grid-based combat. This would later form the backbone of *Heroes Of Might & Magic*.

Increasingly the genre began to rise in popularity on PCs, however, with home consoles becoming far more limited in terms of technical capabilities, a fact that would be proven in 1991 with the release of two key titles in the genre. The first was *Battle Isle* by German developer Blue Byte. Based on a hexagonal grid, *Battle Isle* required smart positioning and unit types that had strengths and weaknesses. Its simplicity was its success, the gameplay later being matched in Nintendo's incredibly popular *Advance Wars* for the GBA in 2001. Most interesting, however, was Blue Byte's market base in what was already becoming the hungriest consumer of turn-based strategy games: Germany. "All our games were originally developed in German," says Thomas Hertzler, "so players in the largest PC market in Europe at the time didn't have to learn a foreign language to play our games." It was here that PC gaming, too, was beginning to rise in popularity, and *Battle Isle* capitalised on the extra power that came with PC hardware. "I suppose the biggest advantage of home PC versus console was that you had more RAM and sometimes a faster CPU," Thomas tells us. "The extra RAM certainly came in handy, since we could keep track of more unit attributes and larger maps. The real problem was the AI, since it could take minutes on larger maps before you could make your next move. So we tried a split-screen approach, where while the computer made its moves, you could plan your attacks. In theory the player would always be busy doing something, thereby circumventing the turn-based game's biggest disadvantage."

Battle Isle could've been the standout turn-based strategy game of the year, had it not been for Sid Meier. *Civilization* was released originally on DOS, but was later ported to a whole host of console formats, from aging Atari STs to ▶

» [GBA] Turn-based strategy has often relied on a rock-paper-scissors form of unit interaction, but *Advance Wars* distilled it into a core mechanic.

THE BIG INTERVIEW

Capybara's Nathan Vella offers insight on the genre

Which turn-based strategy games do you remember standing out?
Civ certainly tickled the 'just one more game' side of my psyche like no other. I couldn't believe how easy it was to lose hours on that game. To me, *Civ* is like distilled gaming. There was only fun. Even when everything was off the rails and you had the worst game of the night, or you were brand new to the game, you were still having a blast.

Turn-based strategy games are hard to get right – what would you consider to be the best example of the genre?
Naming the best is an impossible task – there are too many seminal TBS games to pick just one. That said, my personal favourite is the *Fire Emblem* series. Something in my brain changed when I started thinking of units as characters. The idea of a team of characters, with their own style, their own storyline, meant that I changed how I played turn-based games. And even worse was the idea of *losing* a character. I went right from playing *Advance Wars* to *Fire Emblem*, and I can clearly remember how much more intensely I played the former (despite loving them both).

A lot of turn-based strategy games are based on board games or have board game qualities. Why do you think there are similarities between the two?
After *Clash Of Heroes* was picked up by Ubisoft, we started prototyping the game as a board game. Capy creative director Kris Piotrowski printed off game boards that were simply two grids divided by a thick line, and we bought a whole bunch of coloured plastic coins to represent units. Rules were sorted, moves defined, and abilities tested. After a while, the team would get locked in actual intense matches, and people would play for quite some time. With just some paper and some coins, we were able to wrap our heads around the guts of *Clash Of Heroes*' puzzle battle design. I think the similarities exist so strongly between traditional board games and TBS games because they share the same DNA and in some cases offer very similar experiences, albeit in very different forms.

1990

KING'S BOUNTY
■ New World Computing's first 4X game probably seems like more of a footnote – sales-wise – but it laid the core gameplay for *Heroes Of Might & Magic* later.

1991

BATTLE ISLE
■ This hex-based title rarely gets credited for much, but it built up a devout following for its great graphics, impressive AI and deep, deep strategy.

FIRE EMBLEM: SHADOW DRAGON AND THE BLADE OF LIGHT
■ While technically more of an RPG, *Fire Emblem* was the first to spin off the tactics strategy of the likes of *Nobunaga's Ambition* into what we now know as SRPGs.

1992

1993

MASTER OF ORION
■ Though flawed, *Master Of Orion* was responsible for designing the template by which so many space 4X games would later follow, focusing as much on planet management as combat.

SID MEIER'S CIVILIZATION
■ If anyone was going to make the most important game in the genre, it was bound to be Sid Meier.

1994

UFO: ENEMY UNKNOWN
■ *X-COM* – the US name the series would officially become known as – drew in a cult following – a perfect mix of mechanics and atmosphere that hadn't been done before.

1995

HEROES OF MIGHT & MAGIC: A STRATEGIC QUEST
■ Utilising the popular *Might & Magic* RPG title for a strategy game was a smart move for New World Computing, which had designed the core mechanics years earlier.

1996

SID MEIER'S COLONIZATION
■ Playing on the success of *Civilization*, *Sid Meier's Colonization* became a popular reoccurrence for the *Civ* franchise – one that fans clamour for with each main title release.

1997

Bluffer's guide

MYTHOS GAMES
■ BASED IN:
Harlow, England
■ KNOWN FOR:
X-COM

NEW WORLD COMPUTING
■ BASED IN:
California, USA
■ KNOWN FOR:
Heroes Of Might & Magic

BLUE BYTE SOFTWARE
■ BASED IN:
Düsseldorf, Germany
■ KNOWN FOR:
Battle Isle

KOEI
■ BASED IN:
Tochigi, Japan
■ KNOWN FOR:
Nobunaga's Ambition

PARADOX INTERACTIVE
■ BASED IN:
Stockholm, Sweden
■ KNOWN FOR:
Crusader Kings

FIRAXIS
■ BASED IN:
Maryland, USA
■ KNOWN FOR:
Civilization III

MICROPROSE
■ BASED IN:
Maryland, USA
■ KNOWN FOR:
Civilization

HOME COLONIES

The world's most well-known purveyors of TBS

"The game was pretty crap really, in my opinion – we had to knock it into shape pretty quickly"

Julian Gollop

» [PC] *Civilization V* has been the most successful *Civ* game since *Civ III*, proving it's got a long way to go before it's out.

AGE OF WONDERS

■ Though it was very much of the *Heroes Of Might & Magic* vein of 4X strategy, *Age Of Wonders* still managed to draw in enough of its own crowd of fans to stand out.

SHOGUN: TOTAL WAR

■ Though we'd more likely class it as a real-time strategy game, *Shogun: Total War*'s turn-based overworld map employed a lot of elements seen in grand strategy titles.

1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005

SID MEIER'S ALPHA CENTAURI

■ Though easily mistaken as an expansion pack for *Civilization*, Alpha Centauri was distinct *and* implemented a lot of innovation into the genre.

ADVANCE WARS

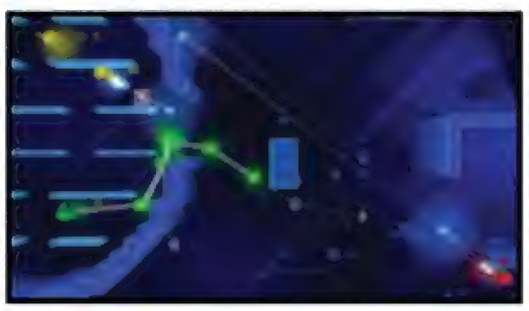
■ Leave it to Nintendo to popularise a genre best known for its inaccessibility and po-faced attitude. *Advance Wars* was a revelation when it was released.

CIVILIZATION III

■ Considered by many to be the ultimate *Civilization* experience, the addition of culture radically changed the franchise and added a whole new level to its gameplay.

console platforms like Nintendo's SNES and Sony's upstart PlayStation in 1995. To say *Civilization* had an impact on turn-based strategy games is an understatement, with the game popularising the 4X genre with its unique take on history. Beginning at the dawn of man, *Civilization* had its players duke it out against other competitors to become the de facto nation of the world. "If you don't start out with a great game or get to a great game fairly quickly, you're dead," Don Daglow says of how *Civilization* became such a standout franchise in the genre. "However, if you build a truly great game – if you build something that is just really, flat-out fun – even if you don't have a massive group of devotees, if you've got a group that really love your game; that's step one. And obviously the initial *Civ* qualifies."

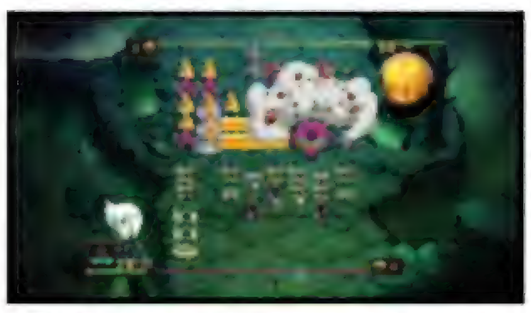
Civilization's success prompted a boost in turn-based strategy, with the likes of Simtex's *Master Of Orion* (DOS, 1993) or its fantasy equivalent *Master Of Magic* (DOS, 1994) adding to the 4X subgenre. Elsewhere *Jagged Alliance* brought squad-based combat further in view, bringing with it equipment and gear that had a very visual effect on the gameplay – each shot was highlighted as a percentage, with it being possible to target the head, arms or torso. Meanwhile the *Shining Force* series – with its first appearance on Mega Drive in 1992 and its sequel in 1993 – was forging a path into role-playing, as the two genres began to blend.



» [PC] What *Frozen Synapse* lacked in visual fidelity it more than made up for in its depth of strategic gameplay.

» [PC] Firaxis' reboot of the *X-COM* franchise was a roaring success, maintaining fan appeal but modernising its core gameplay mechanics.

In 1994 Julian returned with a new masterpiece of turn-based strategy, *UFO: Enemy Unknown* – better known in the US as *X-COM: UFO Defense*. It built upon Julian's earlier work with *Laser Squad*, but added with it a whole new means of strategy – combining resource management with intricate combat missions. But the game itself – which had been in development for a couple of years – was not smooth going for Julian: "On *X-COM* the actual game idea only really came together right at the end of development, it just all came together and it worked very well." In truth, a large number of bugs, problems with the two distinct modes not gelling together and an unfair difficulty made *X-COM* a tough project to judge. "The game was pretty crap really, in my opinion," says Julian. "So we had to knock it into shape pretty quickly; all the elements were sort of there, but there were bugs – such as one that would stop the gameplay completely, or the data and pacing of the game was a bit out of whack. You'd lose too easily; you couldn't actually play very far into the game basically. So that was a big problem." It was this difficulty that later became the cornerstone for the franchise, with its cult following growing attached to *X-COM*'s soldiers. It drew out stories among friends, but it was the impending sense of struggle that truly pulled gamers into the unique game.



» [PC] Originally on DS but later cross-platform, *Might & Magic: Clash Of Heroes* was a lesson in superb game design.

From there the genre remained in a state of consistent comfort. It was a genre built on growth, and with the key franchises all set in place it was a case of sequels and expansion packs for years. *Civilization* and *Heroes Of Might & Magic* maintained their steady popularity, but despite the glut of turn-based strategy that appeared very few managed to retain any sense of mainstream popularity. That was, until *Advance Wars*. Riffing on a similar rock-paper-scissors unit gameplay we had seen years earlier in *Battle Isle*, *Advance Wars* was released in 2001 for GBA to huge critical and commercial success. The difference here was its cartoony and humorous appeal, which removed the rather stoic, steadfast presentation the genre had become known for. "I thought [*Advance Wars*] was just an amazing game when that came out," Julian tells us. "I thought that Nintendo had actually made a turn-based strategy games really cool when *Advance Wars* came out. To me that was just mind-blowing; I was so overjoyed with it that I always wanted strategy games for Nintendo's handheld."

2001 also saw the release of *Civilization III*, which brought with it the addition of Culture – an additional city resource that could be used against your opponents, a weapon to use outside of combat that gave a whole new depth and variety to the turn-based strategy genre. But while *Civ III* would not be the last in the series, it stands as sad testament to the peak of the genre's popularity. As the rise in real-time strategy caught up and overtook its more considered equivalent and 3D gaming became more prevalent (and with it, a heavier focus on action-orientated titles), turn-based strategy dwindled and hasn't truly recovered. Recent releases of much loved franchises have gathered interest, whether it's *Age Of Wonders III* or Firaxis' reboot of Julian Gollop's most-loved franchise with *XCOM: Enemy Unknown*. The genre, it seems, is in something of a revival thanks in large part to the popularity of Steam and PC gaming. "I think it is not a rise and fall story," says Don Daglow, "we're not looking at a parallel to Napoleon here, I think it's more of a sine wave, but it's an irregular wave that has its own business cycles. And so you recognise times where it's going to be harder to make money in this way, and you recognise times when it's going to easier. And you recognise times when there's a vacuum and you want to go fill that vacuum." For a genre of gaming that has been among the first, it'd be a shame for such a rich category to truly disappear.

MIGHT & MAGIC: CLASH OF HEROES

■ This was not only truly original in its design, but its core mechanics were so solid and considered it should one day be deemed a classic.

XCOM: ENEMY UNKNOWN

■ Firaxis managed to make two things relevant again with the release of its reboot: *XCOM* and turn-based strategy on consoles. It is an outstanding achievement of strategy design.

2006 · 2007 · 2008 · **2009** · 2010 · **2011** · **2012** · 2013

FROZEN SYNAPSE

■ This unique indie title turned the genre on its head by enabling simultaneous turns, allowing you to undo and retry where your strategy failed.

CLASSIC MOMENTS

Saboteur

» PLATFORM: VARIOUS » DEVELOPER: DURELL » RELEASED: 1985

The conclusion to *Saboteur* is a tension-filled classic. Having infiltrated the enemy base, snatched the all-important disk and planted a bomb in the computer room, you must make good your escape via the helicopter on the roof. "Get to the chopper!" in other words.

The bomb is ticking, so your run from the computer room to the roof needs to be perfect. You dash down tunnels and scurry up ladders, while dogs snap at your heels and guards fling pointy things at you, until you reach the final test: a perilous series of gantry jumps (which are made more difficult on higher skill levels). Succeed and you reach the helicopter with seconds to spare. An animated sequence shows the roof opening and the chopper taking off. The only thing missing is a screen where we see the explosion, but then memory must have been severely limited when you consider the game's large sprites, massive map and different skill levels. Saying that, for the sequel, coder Clive Townsend managed to shoehorn an even bigger adventure into 48Kb.

BIO

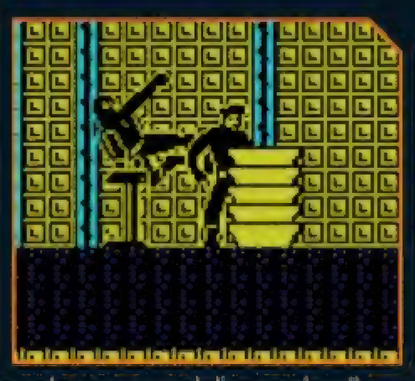
Saboteur was programmed by Clive Townsend and published by Durell Software. It was a combination of two of Clive's earlier unreleased titles: *Ninja* and *Death Pit*. The game was originally developed for the ZX Spectrum and ported to other 8-bit machines including the C64 and CPC. *Saboteur* became a smash hit, selling more than 100,000 copies and warranting a sequel. Subtitled *Avenging Angel*, the follow-up was bigger and regarded as better. Work on *Saboteur III* began at Durell but was later shelved. Clive has revisited the third game several times since, but as yet no release has materialised.

MORE CLASSIC SABOTEUR MOMENTS

Inflatable Entrance

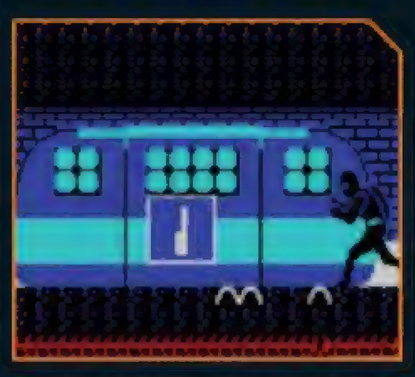
Rather than just appearing outside the base, our mercenary makes his arrival in a rubber dinghy. He then leaps from the boat and climbs up a wooden post onto the pier. It's very Bond-esque and sets the scene for the game. This opening would be outdone in *Saboteur II*, where the mercenary's sister zooms in on a hand-glider and drops gracefully onto the roof of the base.

Stealthily Does It



Forget *Metal Gear* – *Saboteur* was experimenting with stealth gameplay well before the arrival of Solid Snake. You often find guards with their backs to you and by tapping the direction key, or nudging the joystick, you'll creep towards them without drawing their attention. Then, when close enough, you can deliver a deadly kick to the back of the head.

Underground Transport



Deep underground are two handy trains: one connects the warehouse section of the base with the computer complex, the other provides a shortcut beneath the computer rooms. The trains add to the 007 vibe and also help give the game a genuine sense of scale: it really does fell like you're sneaking around a sprawling complex.

Set Us Up The Bomb

There are three ways of completing the game: you can go straight to the chopper empty-handed, you can escape with the disk, or to earn maximum points, you can grab the disk *and* plant the bomb before escaping. To do this you need to first find the bomb (its location varies depending on the skill level selected) and then plant it in the main computer room.

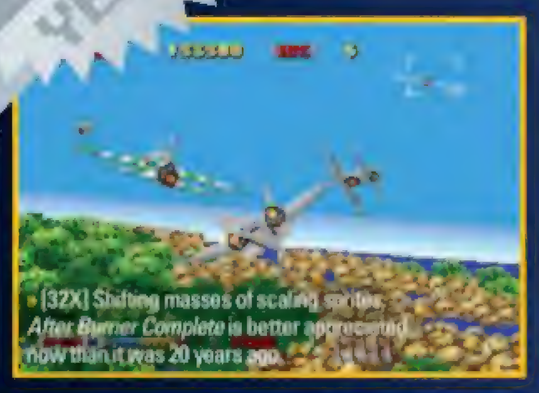
SEGA 32X

The infamous mushroom-shaped Mega Drive expansion has been described as Sega's biggest mistake and one of the worst systems of all time. Nick Thorpe looks back at the history of Sega's least-loved platform and assesses whether it's worth your time today

Our story begins in January 1994 – a time when Sega was on top of the world. In spite of fierce opposition from Nintendo, the Mega Drive had become an established success and Sega had gone from being a distant second place in the console wars to the narrow leader. However, every king is one day dethroned and the Mega Drive's 16-bit hardware, by then over five years old, was beginning to look rather long in the tooth. The previous year had seen two new machines arrive on the market, and while neither the Atari Jaguar nor the 3DO would become particularly successful in their own right, it was clear that they were technologically superior. A new generation was dawning and Sega needed to figure out its strategy.

The decision-making began at the CES trade show. Sega's Japanese CEO Hayao Nakayama made the call to Joe Miller, head of research and development at Sega of America. New consoles were already on the market, Nakayama reasoned, so a response was needed as soon as possible. It wasn't just Atari and 3DO that Sega had to worry about, either – other companies were already starting to show their hands. Nintendo had announced a partnership with Silicon Graphics, Inc for its next console, and word was that Sony had demonstrated a new machine too. While ▶

STAR WARS
ARCADE
MEGA DRIVE
MEGA DRIVE 32X
SEGA
16-BIT
POWER
ON
MEGA DRIVE CONTROL PAD
START
SEGA
MEGA DRIVE 32X



» [32X] Shifting masses of scaling sprites. *After Burner Complete* is better appreciated now than it was 20 years ago.

» [32X] *Virtua Hamster* is among the many internal projects cancelled by Sega when the going got tough.

Sega had its own next generation hardware in the works in the form of the 32-bit Saturn, Nakayama was concerned that it wouldn't arrive in 1994, and wanted to have a machine ready by the end of the year.

One of the key proposals was simply to release an upgraded Mega Drive, with greater colour handling capabilities and the ability to do 3D visuals, as had recently been achieved with an additional chip in *Virtua Racing*. There was only one problem – creating such a system from scratch within the timeframe required was an impossibly tall order. Joe Miller and his team began to explore options which utilised the existing Mega Drive hardware as a base and added new capabilities, much in the same way as Sega had previously done with the Mega-CD. Luckily, another project could provide a guide as to how to achieve this. The Jupiter was a proposed 32-bit system that had theoretical specifications similar to those of the Saturn, but wasn't the preferred option due to its use of cartridges over CDs. The decision was made to discontinue Jupiter in favour of a new project named Mars, an upgrade module which added some of the proposed Jupiter hardware to the Mega Drive. It was this project that became the 32X.

The 32X plan offered a number of potential benefits. Existing customers could buy into the next generation at a discount, maintaining their existing library of Mega Drive games in the process, and when the Saturn eventually arrived the 32X could continue serve as a budget-friendly option for younger gamers. Additionally, the machine would help developers to transition to the Saturn – dual Hitachi SH2 CPUs formed the core of both machines. It was an ambitious plan, but one that could simultaneously extend the life of the Mega Drive and pave the way for the Saturn's success if it paid off. The machine would still have to go from the drawing board to store shelves in just nine months in order to hit the all-important holiday sales season, but it at least seemed feasible.

The task of making this happen largely fell to Sega of America, as the Japanese branch was preoccupied with getting the Saturn ready. Being saddled with the unproven upgrade route wasn't a tremendous concern for the staff, though. "We had high hopes but knew it was a stab in the dark," recalls John Brandstetter,

AV OUT

■ While the 32X supports RGB SCART which guarantees excellent picture quality, the composite encoder in the 32X is much improved over any of the ones found in standard Mega Drive models.

POWER SUPPLY

■ The 32X requires its own power supply, and uses a similarly bulky adaptor to the Mega Drive's power supply. This can cause issues on power strips, as they don't fit well next to each other.

AV IN

■ This port receives RGB video from the Mega Drive, allowing for the 32X to overlay its own visuals. The two layers can sometimes desynchronise, causing an odd effect where one layer shakes as the other remains static.

> **"I spent many hours in Japan with the Model 1 teams, but nothing could be ported over"**
>
> John Brandstetter

then a producer at Sega. John was in charge of getting one of Sega's marquee products to market – a conversion of its Model 1 arcade release *Star Wars Arcade*. "We had six months, 24 hours a day, which is what I had to do to push my team to do it from start to finish," he explains. This would have been fine if everything else was up to scratch, but developers quickly found out that it wasn't. "I had to travel to Japan many times to get development kits," recalls John. "The hardware was very flaky and broke often." It's an account corroborated by *Motocross Championship* programmer Alexander Smith: "Our team leader went to meetings in Japan in May of 1994 and he got us a couple of development systems. Those were beige metal boxes about the size of a bar fridge, half filled with electronics. One got shaken up too much in shipping and didn't work at all, so we had just one to develop on."

For the *Star Wars Arcade* team, that was just the beginning of the hardware trouble. "I spent many hours in Japan with the Model 1 teams, but nothing could be ported over," explains John. The 32X and Model 1 were just too far apart – their technologies were completely different. "We used no art or code from the arcade game, everything is from scratch. We had to recreate everything," John tells us. Meanwhile, the lack of development hardware forced the *Motocross* team into an unusual solution to keep development going, as Alexander explains: "our build also ran on the PC, though just in 8-bit VGA colour, so game coding and artwork additions could continue while the 32X side was bottle-necked."

ASSEMBLE THE MEGATRON

What happens when you combine the 32X with the Mega-CD?

■ **Owners of the Mega-CD weren't forgotten when Sega was designing the 32X, and the provision was made for both add-ons to work together. However, it was recognised that there would be few owners of both, so only six Mega-CD 32X games were released. All of them were FMV games which utilised the platform for its ability to handle better quality video than the Mega-CD alone, and none were exclusive to the system. "The reason we wanted to use the 32X was because it afforded a much better colour palette to display video," said Tom Zito, former CEO of Digital Pictures. The developer was the most prolific supporter of the Mega-CD 32X format, releasing enhanced versions of *Corpse Killer*, *Night Trap*, *Supreme Warrior* and *Slam City With Scottie Pippen* in both North America and Europe. "We had a nice business relationship with Sega, so to the extent that we were able to support Sega, we wanted to do it," Tom explains. "They were extremely helpful to us in our early days, and I'm a big believer that if somebody helps you, you help them." Sega itself advertised a variety of 32X-enhanced games, but only two were ever released. *Fahrenheit* was released in North America exclusively, and bundled with the standard non-32X version of the game. *Surgical Strike* was widely believed to have been cancelled until a Brazilian version was found, published by local distributor Tectoy. Bizarrely it appears to be the only Mega-CD 32X title released in the region, and very few copies are known to exist.**

[32X] *Doom* was impressive on release, but has received retrospective criticism for its windowed display and missing levels.

[32X] *FIFA*'s 3D stadium was impressive, but the jerky player sprites made it a chore to play.

As production on games moved on, the hardware was still in flux. "Our game was the only one that really used both CPUs and up to the last minute we almost had to rewrite games for one CPU due to cost savings bickering in Japan," explains John. Why was it the only game making use of the hardware in such a way? According to Alexander, it's because it was difficult to get the second CPU doing anything useful: "the ROM cartridge memory bus was slow, so anything that didn't fit in the 4K CPU cache would access the ROM for instructions and slow down. Thus multithreading anything complex would make things too slow. I vaguely recall that we had tried alternate scan line multithreaded rendering, using the two CPUs that way, and it was a flop." The struggle to utilise the dual CPU configuration resulted in an unusual use of the system's capabilities. "We had a look at the sound system and dedicated one of the SH-2 processors to mixing samples to make engine noises."

Still, it wasn't all hard going and some of the new capabilities could be exploited well. "We wanted something that you couldn't do with the limited colours of the old hardware, something that would look different. The answer was mud," recalls Alexander. "Yes, instead of three or four browns, we had many more shades we could use for dirt. It looked photorealistic! Well, at least in comparison to the old palette technology. I remember calling the boss over to come and see the amazing mud track in 3D when I had it working for the first time."

The *Star Wars* team was stretching the system in a different way, with audio. The iconic *Star Wars* theme was included, but John explains that getting it in was a slow process: "Computers were slow to compress audio for games back then, it took days where now it takes seconds." Time was of the essence too, as the team was engaged in a race. "We and Sega of Japan had been competing for who would be first launch, *Virtua Racing* or *Star Wars*," John remembers. "We found hard crashes in *Virtua Racing* when they said they finished before us, forcing them to stop mastering!"

For all of the pain involved in getting it to market, Sega managed a reasonably strong launch for the 32X. The add-on arrived in November 1994 at a price of $159.99 (£169.99 in the UK). *Star Wars* and *Virtua Racing Deluxe* were joined by a decent but rushed version of the hit first-person shooter *Doom*, and all three games received a positive critical response which led to brisk sales over the holiday season. In fact it's entirely possible that the machine could have done better, had Sega been able to fulfil its hardware orders, but the Saturn's reliance on the same CPUs held back production. It was a promising start,

[32X] Despite arriving too late to alter the 32X's fortunes, *Virtua Fighter* is easily amongst the system's best games.

[32X] *Star Wars Arcade*'s environments convinced many of the early adopters to purchase the add-on.

[32X] Long held as the best *Virtua Racing* conversion, *Virtua Racing Deluxe* added two brand new tracks.

but the momentum would quickly be squandered by a lack of focus. The Saturn was out in Japan and being geared up for a worldwide launch, so key teams were working towards getting software ready. The Saturn wasn't the only machine diverting Sega's attention, either – the company was still officially supporting the Mega Drive, Mega-CD and Game Gear worldwide, and the Master System in Europe.

Perhaps as a result of the stretched resources, the next wave of software was far less inspiring than the launch titles. Conversions of *Space Harrier* and *After Burner* arrived in near-perfect form, but the wisdom of releasing old arcade games to show off a new platform was questionable – indeed, *Mean Machines Sega* described the move as "the biggest mistake Sega could possibly make." Meanwhile, original games like *Cosmic Carnage* and *Motherbase* were incredibly underwhelming and offered gamers little reason to buy the machine. Support from third parties was thin on the ground, too. Acclaim's conversion of *Mortal Kombat II* was an early highlight, but little else was available.

Still, there was hope for the future. In the spring of 1995 Sega announced the Neptune, a new Mega Drive model with integrated 32X hardware which would ensure that new owners would automatically have access to the enhanced software. Around the same time, images of an impressive 3D tech demo from *Scavenger* studios Zyrinx and Lemon made the rounds in magazines. Two sections in particular related to games in development. Lemon showed off an early environment from *Amok*, while Zyrinx showed some fully textured 3D interiors utilising the technology from *X-Men: Mind Games*. The video showed that the 32X had the potential to deliver the games that players wanted – games which offered real advances over Mega Drive releases.

Consoles don't thrive on potential, though – they need games, and when third parties finally started to deliver in the latter half of 1995, the games just weren't up to scratch. Games like *Primal Rage*, *Pitfall: The Mayan Adventure* and *WWF Raw* might have displayed more colours than the standard Mega Drive versions, but they played identically. Still, they were at least being released – by this point both Sega and third parties were rapidly moving projects onto the Saturn or cancelling them outright. The promising *Scavenger* games never materialised, with *Amok* eventually switching to the Saturn and *X-Men* being cancelled outright. John worked on robot cop platformer *Ratchet & Bolt* and *32Xtreme Sports*, neither of which saw release in any form. A massive summer price cut to £99.99 did little to bolster the machine's fortunes.

By the time *Virtua Fighter* arrived in November, the writing was on the wall. It was an excellent conversion, but too little and too late – the Saturn was about to receive an incredible conversion of the superior sequel. A 95% review in *C&VG* was tempered with these sobering words on the future of the add-on: "If it's gaming with a serious future you want, the extra monetary investment in a higher-specced 32-bit system will reap rewards in both the short and long terms." It was an accurate assessment – the game was the last Japanese 32X release, and software support would cease by January 1996 for North America and Europe, ending with *Spider-Man: Web Of Fire* and *Darxide* respectively.

If you know what you're letting yourself in for, the 32X is actually a reasonable proposition for collectors today. The marketing of the time positioned it as an alternative to the PlayStation and Saturn by necessity, but distance allows us to see it as a mere Mega Drive upgrade. It's actually worth picking up a 32X if you can find it cheaply, thanks to a collection of high quality conversions. *Virtua Racing Deluxe* is a clear improvement over the Mega Drive release and much better than the Saturn game, *After Burner* and *Space Harrier* are near-perfect, and *Star Wars Arcade* is the only home conversion of Sega's Model 1 game. *Stellar Assault* is the best of the original titles, and we've got a soft spot for divisive releases like *Kolibri* and Knuckles' *Chaotix*. Even the Mega Drive upgrades, disappointing as they were at the time, feel a lot more reasonable when you've not paid £170 on the promise of a new level of gaming.

However, it's easy to see how it has acquired its toxic reputation. It's entirely understandable that you'd be annoyed if you'd bought a 32X at full price, only for it to fail to deliver on its promises and potential, and in hindsight it's clear that the add-on was a bad idea. When asked how he felt about the system's failure, Alexander pulls no punches: "Not too bad, though it's a bit of a design flaw to have dual 32-bit processors bottle-necked by the slow ROM bus. 32X was obsolete almost immediately, with the PSone and the Saturn appearing soon after." John is a little kinder: "It was meant to be a stop-gap. Had the Neptune became a reality we would have had more success, but we all knew it was a short life-cycle product." But it's Alexander that neatly summarises the 32X's lasting contribution to gaming: "32X was a lesson future game console makers learned well."

32XPENSIVE

Collectors beware – these rare, pricey cartridges make a 32X collection hard to complete...

ESTIMATED PRICE £1000+

T-MEK

■ There are less than ten known PAL copies of Atari Games' futuristic tank blaster, so prices are sky high and sales very rare.

ESTIMATED PRICE £1000+

PRIMAL RAGE

■ This is a common game in North America which is scarce in PAL form – less than ten copies are known to be in circulation.

ESTIMATED PRICE £700+

DARXIDE

■ While not as rare as *Primal Rage* or *T-Mek*, *Darxide* retains a huge value due to its status as a PAL-only release.

ESTIMATED PRICE £225+

SPIDER-MAN: WEB OF FIRE

■ This platformer was a late release, becoming the final 32X game to be released in North America when it arrived in 1996.

ESTIMATED PRICE £100+

SANGOKUSHI IV

■ While some PAL games like *Kolibri* tend to command a higher price, *Sangokushi IV* is more of a pain to acquire.

EVALUATING THE EXPANSIONS

Over the years, console add-ons have acquired a bad name – but do they all deserve it?

FAMICOM DISK SYSTEM

VALUE ADDED: 4/5

■ The Famicom Disk System stands as one of gaming's better add-ons, and not just because of its library of 229 games – the use of rewritable disks allowed players to save games. Better yet, new games could be acquired cheaply from Nintendo's Disk Writer kiosks.

TURBOGRAFX-CD

VALUE ADDED: 5/5

■ If you were a TurboGrafx owner who bought this add-on for its $399 launch price, you might have become quite annoyed when only 45 games were ever localised for it. Thankfully, this add-on is an importer's dream – the lack of region protection allows access to all 417 Japanese PC Engine CD-ROM games.

MEGA-CD

VALUE ADDED: 3/5

■ The other Mega Drive add-on boasts 209 games, but its large library is remembered for being bulked out by lazy cartridge conversions and a large number of FMV games with dodgy video. Luckily it also offers some genuine must-haves such as *Sonic CD*, *Snatcher*, *Final Fight* and *Shining Force CD*.

JAGUAR CD

VALUE ADDED: 2/5

■ Released for $149.95 in the Jaguar's dying days, this add-on is in short supply due to both low production numbers and general unreliability. While only 11 games were released during the system's short lifespan, the add-on has value for homebrew fans who are able to easily burn games to CD.

64DD

VALUE ADDED: 1/5

■ Nintendo's decision to revisit the rewritable disk format for the N64 was an unmitigated disaster. First unveiled in 1996, it was massively delayed and only hit the market in December 1999. The Japan-only expansion died a quick death, with only nine titles officially released in its single year on sale.

x5 images © Evan-Amos

"Multithreading anything complex would make things too slow"

John Brandstetter

retro GAMER

Subscription Voucher

☑ **YES! I would like to subscribe to Retro Gamer**

YOUR DETAILS

Title_____ First name_____

Surname_____

Address_____

_____

_____

Postcode_____ Country_____

Telephone number_____

Mobile number_____

Email address_____

(Please complete your email address to receive news and special offers from us)

DIRECT DEBIT PAYMENT

☐ **I will only pay £15 for 6 issues (saving 50%*)**

Instruction to your Bank or Building Society to pay by Direct Debit

DIRECT Debit

Please fill in the form and send it to: Imagine Publishing Limited, 800 Guillat Avenue, Kent Science Park, Sittingbourne, ME9 8GU

Name and full postal address of your Bank or Building Society

To: The Manager — Bank/Building Society

Address

Postcode

Originator's Identification Number: 5 0 1 8 8 4

Reference Number

Instructions to your Bank or Building Society
Please pay Imagine Publishing Limited Direct Debits from the account detailed in this instruction subject to the safeguards assured by the Direct Debit guarantee. I understand that this instruction may remain with Imagine Publishing Limited and, if so, details will be passed on electronically to my Bank/Building Society

Name(s) of account holder(s)

Branch sort code

Bank/Building Society account number

Signature(s)

Date

Banks and Building Societies may not accept Direct Debit Instructions for some types of account

PAYMENT DETAILS

YOUR EXCLUSIVE READER PRICE 1 YEAR (13 ISSUES)

☐ **UK £51.90 (Save 20%)** ☐ **Europe £70.00** ☐ **World £80.00**

Cheque

☐ I enclose a cheque for £_____

(made payable to Imagine Publishing Ltd)

Credit/Debit Card

☐ Visa ☐ Mastercard ☐ Amex ☐ Maestro

Card number

Expiry date

Issue number ☐☐ (if Maestro)

Signed _____

Date _____

Code: PAL143Q

Please tick if you do not wish to receive any promotional material from Imagine Publishing Ltd by post ☐ by telephone ☐ via email ☐

Please tick if you do not wish to receive any promotional material from other companies by post ☐ by telephone ☐ Please tick if you DO wish to receive such information via email ☐

*Terms & conditions: Pricing will revert to our standard offer of £22.50 every 6 issues on the third payment made. Subscribers can cancel this subscription at any time. New subscriptions will start from the next available issue. Offer code PAL143Q must be quoted to receive this special subscription price. Details of the direct debit guarantee are available on request. Offer expires 31st January 2015. Imagine Publishing reserves the right to limit this type of offer to one per household.

Return this order form to: Retro Gamer Subscriptions Department, 800 Guillat Avenue, Kent Science Park, Sittingbourne ME9 8GU or email it to retrogamer@servicehelpline.co.uk

You can manage your subscription account online at www.imaginesubs.co.uk

EXCLUSIVE SUBSCRIBER BENEFITS

Start a Direct Debit today and for just £15 get the next six issues – saving over £30 a year

- Save 50% on the cover price
- Free UK delivery and money-back guarantee on any unmailed issues
- Be the first to receive the latest **Retro Gamer** articles

Subscribe & SAVE 50%

Retro Gamer is the ONLY magazine in the UK that's 100 per cent dedicated to the fascinating world of classic gaming. Don't miss out!

Call Now **0844 848 8412** or subscribe **online**

The UK's ONLY monthly magazine committed to classic gaming, **Retro Gamer**'s pool of prestigious games industry retro experts work tirelessly to bring you a magazine devoted to the games of yesteryear.

THREE EASY WAYS TO SUBSCRIBE

1. Online

Order via credit or debit card, just visit

www.imaginesubs.co.uk/ret

and enter code **PAL143Q**

2. Telephone

Order via credit or debit card on the phone, just call

0844 848 8412

Overseas: +44 (0) 1795 592 872 and quote code **PAL143Q**

3. Post or email

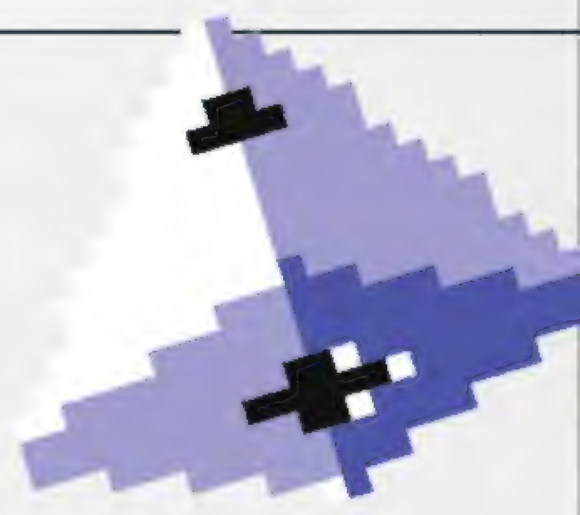
Please complete and post the form to

Retro Gamer Subscriptions Department
800 Guillat Avenue
Kent Science Park
Sittingbourne
ME9 8GU

Or alternatively, you can scan and email the form to

retrogamer@servicehelpline.co.uk

SIMON NICOL



It's 30 years since Simon Nicol started coding for a living – and in that time he had bad luck when it came to getting games released. Andrew Fisher looks back with him on the highs and lows he experienced

The trajectory of Simon's career is a familiar one for many British programmers – a teenager inspired by the arcade games and home systems he has played, teaches himself to code and has a hit game released. Then, over time he has to join a group of similarly skilled people to create better games, or to work on a contract to pay the bills. Disillusionment sets in and the coder finds he is no longer doing what he loves, and in Simon's case he left to work in IT. And now, looking back, there is a sense of nostalgia for the old days. In the new landscape of app stores and indie successes, there is the temptation to return to the games industry and to start creating again, but let us return to the beginning and hear how Simon's love of games started.

SELECTED TIMELINE

GAMES

- **MAD PLANETS** [C64, unreleased] 1984
- **TORNADO LOW LEVEL** [C64] 1985
- **CRAZY COMETS** [C64] 1985
- **SAMANTHA FOX STRIP POKER** [C64, credited as Wolfgang Smith] 1986
- **MEGA APOCALYPSE** [C64] 1987
- **BANGKOK KNIGHTS** [C64, sampled speech] 1987
- **TRIVIA – THE ULTIMATE QUEST** [C64] 1989
- **BACK TO THE FUTURE III** [C64] 1991
- **ROBOCOP 3** [NES] 1992
- **TECHNO COP** [NES conversion, unreleased] 1992
- **LICENCE TO KILL** [NES conversion, unreleased] 1992
- **APOCALYPSE II** [SNES, unreleased] 1994

To begin, what are your earliest memories of playing games?
My earliest memory was when a friend of mine had an Atari 800. I'd go round to his and we'd play *Shamus* – a brilliant game. I didn't have a computer myself until about 1983. But as far as proper arcade games go, shortly after that it was games like *Space Invaders* and *Asteroids*.

Any other arcade games you loved?
The first that I really got hooked on was *TRON*. I'd play it just as often as I could, taking trips down to the arcade and spending what money I had on it. The game was released about the same time as the film so that would be around 1982/1983. I'd watch other players to see how they would do and after a while it came down to three of us who were the hardcore and could reach 'user level' (a level where the game was effectively mastered). When any of us were playing we would draw a crowd!

When did you start learning to program?
Back in those days there was basically no one to learn from. The only book on machine code I had was Rodney Zaks' *Programming The Z80*. To be honest I really didn't understand it. I could see pages of processor instructions with things like LD A, 20. Which I understood would put 20 in the A register, but what I didn't understand was how did you actually get that instruction into the computer? It was one night at about 2am when I was fast asleep and suddenly BOOM! I woke up and realised that the instruction was simply a number sitting somewhere in memory that represented the instruction LD A, 20. This was it! I sat up for the rest of the night writing really simple machine code programs. I was far too excited to sleep.

Mad Planets really inspired you. How long did it take you to create your C64 conversion?
I was still at school at the time I started programming *Mad Planets* and managed to do the bulk of the programming during my summer holidays, I suppose all-in-all it took me about three to four months.

What happened when you showed _Mad Planets_ to software houses?
After having finished writing a very simple version of *Mad Planets* I took it to Quicksilva in Southampton,

» [C64] Simon's first C64 game *Mad Planets* was turned down by software houses.

who – though they thought I was good – told me, no, they didn't want it because it had no storyline. I then took it to Virgin Games, who again liked it but said no. One of the problems I had was I was only 16 years old at the time and too young to even sign a contract.

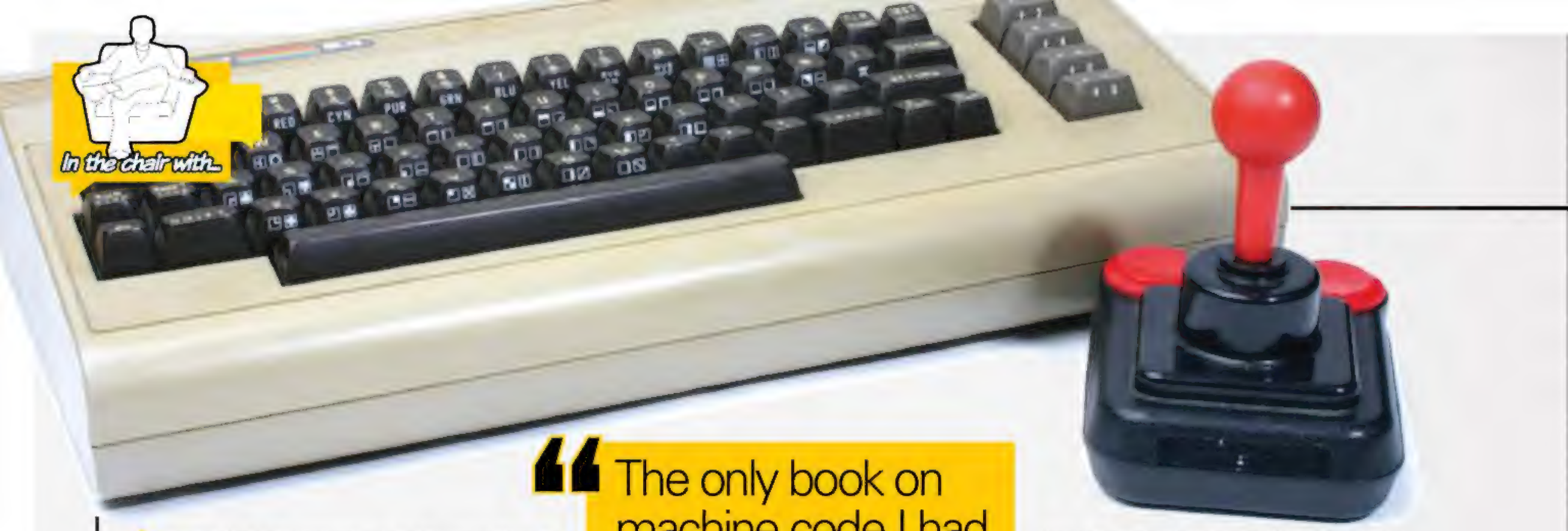
How did you end up with the job converting _Tornado Low Level_?
That was quite funny. After I had failed to sell *Mad Planets* it would seem a coincidence that an agent, Tony Allard (who became a very good friend), got to hear of me and offered me the conversion of *TLL* from the Spectrum to the C64.

How did Martech end up publishing your next game, _Crazy Comets_?
I haven't a clue! [Laughs] I'm not sure if I was looking for a publisher and came up with their number or if they'd heard of me and gave me a call.

One thing that impressed people was how quickly _Crazy Comets_ loaded, in about 27 units of tape...
As far as the loading time goes it was a much smaller game – no sound samples to load.

What was it like working with Rob Hubbard, and what did you think of his music for your games?
Rob Hubbard is awesome. The first I had heard of him was at a computer show in Earls Court. I was at the Gremlin stand and heard the *Monty On The Run* music – it was absolutely brilliant. Nobody, and I

> For many years I denied writing this game, it was done as a favour for my boss
>
> Simon on Samantha Fox Strip Poker



> The only book on machine code I had was Rodney Zaks' Programming The Z80 Simon Nicol

mean absolutely nobody, had even come close to the standard of programming the SID chip that Rob was at. It was really exciting. Rob heard that I wanted to chat to him about doing the music for one of my games, he called me back, we chatted and the rest as they say is history.

Did you have any input into what kind of music Rob composed?
Rob has this gift of grasping the sort of thing I was after and then delivering something that was absolutely mind-blowing! I wouldn't work with anyone else!

Then you created the sequel, *Mega Apocalypse*...
Every game I'd written was from scratch, as I still continue to do so. *Mega Apocalypse* was less about learning to program 6502 and more about how do I squeeze every last clock cycle out of this processor. I had the programming skills by this time, it was now about applying them.

How did Bob Stevenson become involved?
I remember chatting on the phone with my boss David Martin about wanting lots of publicity and Martech really getting behind *Mega Apocalypse*, he said (paraphrasing) 'don't worry Simon, the next game we'll really get behind,' and I said 'no David, this game. This is the game to get behind!' And bless him, he did. I had seen Bob's work, he had a reputation for being the best and so I insisted to Dave that Bob be brought in to do the graphics.

Having said that I've always been involved in designing graphics for every game I've ever written. I would say my work was of a good quality, but there are times when 'good' simply isn't good enough – excellent and stunning, they're acceptable. And so there are times when people who are the best need to be called in.

How were the samples created?
The sound samples for *Mega Apocalypse* were, I think, the best bit of C64 code I've ever come up with. There was a game called *Impossible Mission* that had speech in it. It was really clear speech and at the time it was pretty impressive. You'd finish a level, but then what would happen was the game would stop, there were no other sounds and you'd hear 'SEIZE HIM MY ROBOTS!'. So I tried to see if I could find out a way of doing this myself without pausing the action and to be totally honest it was pretty simple!

As soon as I got this working, I phoned up Rob Hubbard and I was shouting down the phone 'ROB GET A LOAD OF THIS!' and there was 'rotate, speed up, extra life, missile, get ready!' It was really exciting to have this working. I phoned up Dave Martin my boss in the middle and blasted it down the phone to him too.

My favourite sample was 'Get Ready!' There was a game in the arcades at the time called *Space Harrier*. It was a great blast-'em-up and as each level began you'd hear the sound sample 'Welcome to the Fantasy Zone – Get Ready!' Now of course I recorded this, I took a tape recorder; goodness the technology back in those days was really funny. Anyway I recorded this 'Get Ready!' sample, unfortunately there were so many other sounds and noises in the background from other arcade machines, that I couldn't use the sample directly. So I sat in front of my C64 which had this cartridge plugged in (I can't remember what it was called now, sorry) and it had a microphone that would record 8-bit sample data. So I would record myself saying 'Get Ready!' – no, that was too posh, so I'd say it again and again. I'd listen to my recorded version from the arcade and try to copy the accent, the inflection and the timbres. It must have taken me a hundred goes and finally I've got this sound exactly the way I wanted it!

This was the crowning moment and I was thrilled. Of course once I told Rob how it was done and I'd sent him a copy of the code then that was it, the rest of the world knew within minutes! [Laughs]

Was it technically difficult to have samples and music playing?
I was the first programmer to achieve this. The Commodore 64 was now really like an arcade machine! Why was it difficult? The C64 was an 8-bit 6502 with 64K running at 0.98MHz. Having the game code running along with a 3D-starfield, music and sound samples – that really is pushing the system. Commodore themselves didn't believe this was possible until my boss showed it to them.

The main problem of having sound samples run with the game is processor power. Memory is also another constraint. Speed of code here is utterly essential and this was again where I'd break the rules of what would be considered 'good' programming. My speech program would sit in the 'zero page' (the first 256 bytes of memory) and the code would 'self-modify'. This basically means the program would re-write itself as it went along; running it in zero page meant that the code was as small as it could possibly be. Every processor clock-cycle is important, you have to make your code as fast as possible!

» [C64] Save the little spaceships for bonus points and dodge the crazy comets.

» [C64] Einstein's famous formula appeared on the cover of *Crazy Comets*. (Image courtesy of Gamebase64 – www.gb64.com)

» [C64] *Crazy Comets* had two high-score tables – the Ultra High Scores and the Galactic Hall Of Fame.

YOU ASK THE QUESTIONS

Visit www.retrogamer.net/forum for your chance to ask the questions

DRS: Any tips for coding non-stop for over 24 hours?

Goodness, I think to be effective is the most important. Long hours in and of themselves are meaningless if one isn't being productive. However there are some producers/managers who don't believe this (naming no names).

In order to just keep going for those ridiculously long hours it takes an awful lot of concentration, it's not something everyone can do. For me any distraction would drive me potty – things like ringing phones and people coming up talking to me and asking idiotic questions like 'how's it going?' would drive me potty. It can sometimes take hours just to get into the right headspace you need to be in. I always have lots of sheets of A3 paper to sketch on. It doesn't have to been neat, it's just helpful to get some ideas down on paper as you work. I've worked for four days straight in the past but I really don't advise doing this as it can be very dangerous.

MAYHEM: Looking back, which do you prefer, *Crazy Comets* or *Mega Apocalypse*?

As far as the game goes I much prefer *Mega Apocalypse*. *Crazy Comets* still had bugs in it when it was released! I was driven in the middle of the night to a company called Ablex in Telford where many of the UK games companies had their media duplicated. There I am sitting in front of a duplicator trying to add whatever fixes I could before it was mass duplicated. 'We need it now' was always what I heard. No time to sleep, just get it done!

At least with *Mega Apocalypse* I had more time to polish it. As good as the music was for *Mega Apocalypse* my favourite was and always will be *Crazy Comets*.

» [SNES] Grab the power-ups at the start of a wave in *Apocalypse II*.

» [SNES] The attract mode of *Apocalypse II*, showing the points available for pulverising planets.

Is it true you coded *Samantha Fox Strip Poker*? If so, why use an alias?
Who, moi? Err… [Laughs] For many years I denied writing this game, it was done as a favour for my boss. It was a quick knock-it-out project that I didn't want sullying my reputation as a programmer.

***Trivia – The Ultimate Quest* is the least known of your games, written under the name of Duck Soft UK. Did it actually get a commercial release?**
This was I believe published through Grandslam Entertainment. I never saw a copy in the stores so whether it was published or not, I do not know.

You are credited with the sampled speech in *Bangkok Knights* – what do you remember about this game?
Ah, System 3. I have fond memories of this game. After *Mega Apocalypse* was published it did manage to raise a few eyebrows and System 3's owner Mark Cale called me in to do some sound samples for it. It was a fun little project for me and I met some terrific and talented people there.

What did you like about the C64?
The C64 was the most 'programmable' computer I have ever worked on. Other programmers and managed to push that machine way beyond anything Commodore had planned, from getting so many more sprites on the screen, vertical scrolling and speech just to name a few!

Were there any other C64 games by you that went unreleased?
There was a game I wrote with Stavros Fasoulas on the C64 called *CARGO*. Stavros is a brilliant programmer, much respect to the guy. As to what happened to it, I haven't a clue but considering the short time we spent on it, it was pretty good.

And the racing game you were working on?
The 'road racing' game raised a few eyebrows and garnered a lot of interest. It was tragic that financially this was a terrible time for me. It was the late Eighties and interest rates were spiraling out of control and so many people were losing their homes. I wish everything had been in control, I would have loved to finish that game – it would have been a belter!

» Page three girls adorned several games, including *Samantha Fox Strip Poker* and Corrine Russell on Martech's *Vixen*. (Image courtesy of Gamebase64 – www.gb64.com)

How did you end up working for Probe?
I needed the work and when the opportunity to write *Back To The Future III* came along I accepted.

What was it like working on a film tie-in rather than an original game?
Working on *Back To The Future III* was a great experience. I always love working with and being around creative people, and *BTTF* was a tour de force with Hugh Riley who was responsible for the graphics on *The Last Ninja* – a terrifically talented guy and a really lovely person. I was also working with Jeroen Tel and we became close friends. He's a lovely person, good-humoured and extremely talented.

Was it easy to make the transition from C64 to NES? What did you love and hate about the hardware?
When changing hardware format there's always that period of head scratching. It's essential that one has time to play, to do a bit of 'register jamming' to see what the system can do. The NES had 64 sprites instead of the C64's eight, but they were only 8 x 8 pixels in size so there are good and bad things. The NES's sound chip wasn't a patch on the C64's but when you have guys like Jeroen working with you – that man can make a microwave sound like the London Philharmonic.

You apparently worked on two NES film tie-ins for Probe – *RoboCop 3* and *Alien3* – according to online sources…
I had nothing to do with *Alien3*. As for *RoboCop 3*, I only wrote the front end. It was Grant Harrison who wrote the actual game for the NES.

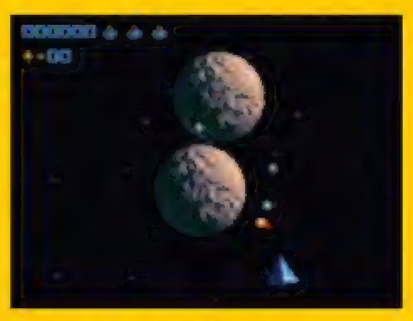
Your next projects were *Techno Cop* and *Licence To Kill* for NES. These were conversions of existing computer games and were due to be published by Tengen – what happened to them?
Techno Cop was a horrible game on all formats, scoring some of the lowest magazine reviews I have ever

FIVE TO PLAY

A look at some of Simon's key games that you should be playing

MEGA APOCALYPSE

■ Simon's third C64 game of planet blasting action won high review scores and an award for Arcade Game of the Year 1987 from *Commodore Computing International* magazine. It featured sampled sounds and speech, huge multi-sprite planets and power-ups all over an improved starfield effect. Rob Hubbard provided a remix of his *Crazy Comets* theme and Bob Stevenson polished the graphics. As the instructions say, find strange and exciting new worlds THEN BLAST THEM TO PIECES!



APOCALYPSE II

■ This is a glimpse of what might have been, Psygnosis (at that time in the process of being bought out by Sony) dropping out of publishing the SNES follow-up to *Mega Apocalypse*. Herman Serrano produced the prettier graphics and the joypad's shoulder buttons made rotating your craft a cinch, with support for up to four players at once on-screen thanks to the multitap. Simon eventually released the beta version for people to download, and we're glad he did.

BACK TO THE FUTURE III

■ It was third time lucky for the film franchise, thanks to Probe. The C64 version combined Hugh Riley's graphics (including some lovely cutscenes) with Jeroen Tel's music (topped by a rendition of the famous movie theme on the title screen) and Simon's coding excellence. Three very different levels – the horseback chase, the shooting gallery and pie dish throwing – lead up to the climatic scene with Marty climbing along a speeding steam train.

TRIVIA – THE ULTIMATE QUEST

■ In the wave of trivia games released in the second half of the Eighties, *Trivia – The Ultimate Quest* on the C64 still stands out, thanks to its excellent presentation and music by the Maniacs of Noise. Resembling a classic pub trivia machine, players are bombarded with increasingly difficult questions (with a choice of three possible answers) to earn points and fill the score bank. It compares well with the official *Trivial Pursuit* conversion by Domark.

SAMANTHA FOX STRIP POKER

■ In these days of online poker and downloadable filth, 8-bit games such as this now seem tame but there were a lot of them. Using the pseudonym Wolfgang Smith, Simon coded a decent poker simulation – with hand-drawn static pictures of pin-up Samantha Fox removing her clothing when the player won enough hands. John York (better known as Rob Hubbard) created SID renditions of *The Stripper* and *The Entertainer* to accompany the action.

» [NES] The menu from *RoboCop 3* was coded by Simon.

» The iconic film poster became the box artwork for Mirrorsoft's *Back To The Future III*.

» Simon signing autographs at the Back In Time Brighton Event in 2003 (photo by Mike Allen).

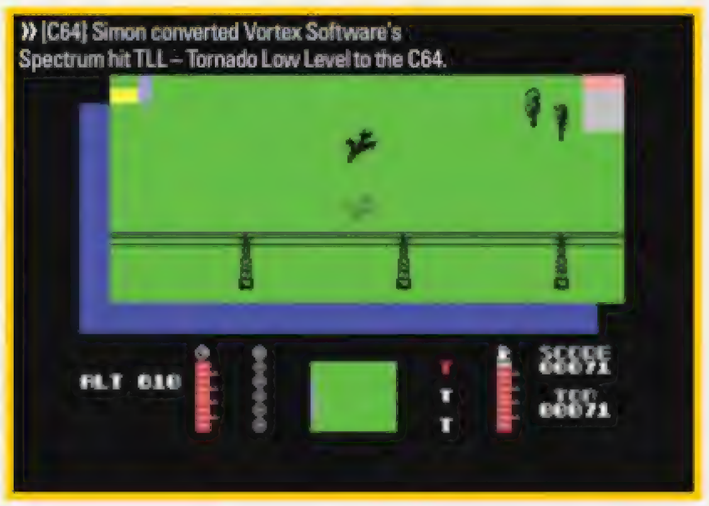
seen, so it can be difficult when you're told 'this is the game we want you to write'. But with a lot of hard work the NES version turned out to be the best of them all, and the music Jeroen [now available online] came up with really rocked! So after everything was finished you can imagine how devastating it is to hear it was never published – having put one's heart and soul into a project only to see it come to nothing really is horrible. But I had no idea Tengen wanted to publish *Techno Cop*, now it all makes perfect sense!

I worked harder than a slave on *Licence To Kill* and yet again it was never published – this was becoming a bit of a running theme for NES games and especially when Tengen/Atari were involved.

Atari had developed their own 'banking chip' – a way of paging in and out areas of memory, like you would with a regular book, there may be many pages in the book but you can only view two of them at the same time. Anyway, Tengen was intent on publishing its own games on the NES, which was exclusively owned by Nintendo. Tengen Atari would say to me, 'we don't like the game's design', 'You were late' etc. But what really happened was Tengen got sued by Nintendo for $300 million and lost! So their right to publish anything on the NES was completely stymied.

You resurrected the *Mad Planets* style for *Apocalypse II* on the SNES – did you enjoy going back to the planet blasting?

I loved programming this game! The SNES is a great machine, though again its sound chip still isn't as good as the C64's SID. It had a 512K cartridge – loads of memory! I really went to town on this one. The SNES had an adapter called a 'Multitap' which allowed four game controllers to be simultaneously connected, so I made a version of *Comets* that had four players simultaneously on-screen – some serious action!



» [C64] Simon converted Vortex Software's Spectrum hit TLL – Tornado Low Level to the C64.

Why did Psygnosis decide not to publish *Apocalypse II*?

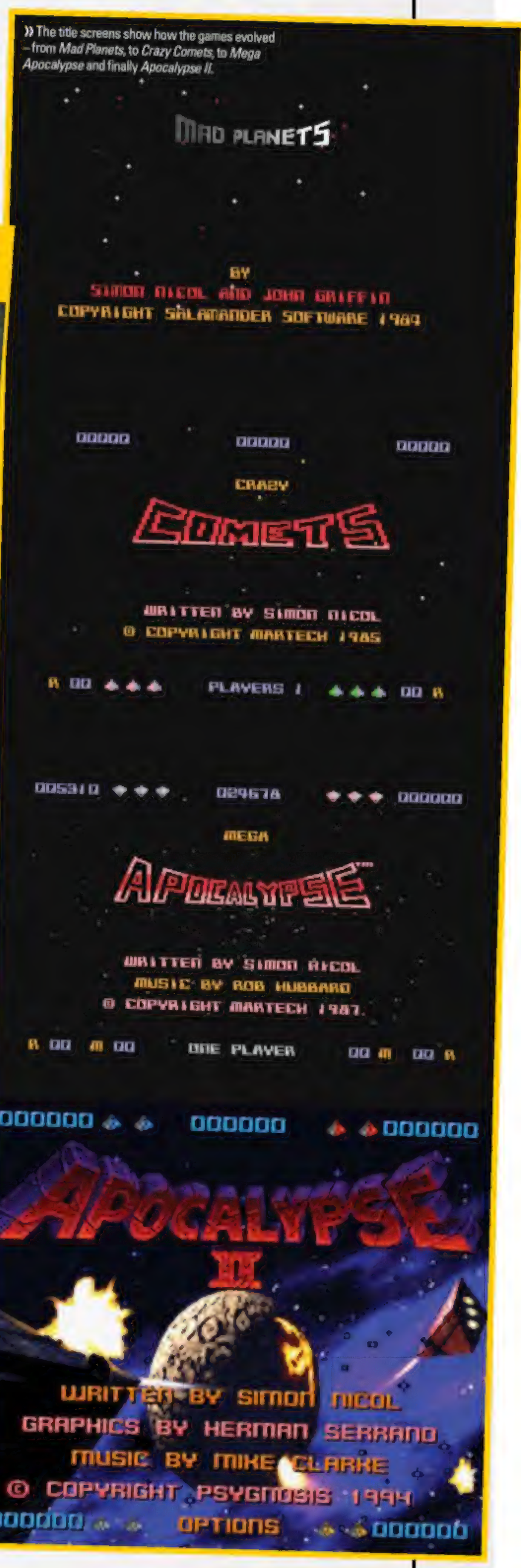
Well again I'm sure you're aware that Psygnosis was bought by Sony. The year was 1994 and *Apocalypse II* for the SNES was completely finished and ready for publication – except for one small detail. That was the year the PlayStation was launched and Sony had decided to pull out of all publication on other console formats – and so yet again I'd done all of the work and got none of the rewards.

Do you feel unlucky to have had all of these games cancelled?

Do I feel unlucky? Yes I suppose so, though I think 'hoodwinked' would be closer to the mark. It's certainly taught me a lesson. There's so much cloak and dagger in the games industry. I've learned a valuable lesson – to do a lot more background research into the companies wanting to publish my games. This can only be achieved by talking to bosses of these companies – which rarely happens these days because a programmer is just a number, just an employee...

» [C64] Simon provided sampled speech for Thai Boxing game *Bangkok Knights*; System 3 flew journalists to Thailand to promote it.

» The excellent box artwork from *Mega Apocalypse*. (Image courtesy of Gamebase64 – www.gb64.com)



» The title screens show how the games evolved – from *Mad Planets*, to *Crazy Comets*, to *Mega Apocalypse* and finally *Apocalypse II*.

There are no credits online for you beyond 1994 – did you leave the industry?
You're right, 1994 is the last time I'd actually completed a game. I did a bit of consulting here and there after that for a bit, but that was all.

Are you planning a comeback?
It just so happens that yes I am! It's been a while since I left, but you know what? I'm really enjoying it, working through the night, pushing the boat out, burning the candle at both ends – I'm not being sarcastic either!

Who were your favourite people to work with?
Goodness, what can I say? There are so many talented people I've met and worked with over the years. It's a difficult question to answer. The household names that we know and love, those people became famous for a reason. But there's also a great number of extremely talented and creative folk who are not well known, either because they work for a large studio, or for companies that think it's more important for the managers and directors to be well known instead of the programmers, artists and musicians.

> "Commodore themselves didn't believe this was possible until my boss showed it to them running"
> Simon on Mega Apocalypse

Any funny stories?
I've got lots of these. One of my favourites is when I was 19 I was asked to convert Atari's *Marble Madness* on the C64 instead of loading from disk to load from tape. As it turned out I needed to visit the programmer Will Harvey at his home in Palo Alto. I flew over to San Francisco and was booked in the Hilton in the financial district. The next morning one of the producers/directors from Electronic Arts came to collect me. As we were driving to the offices I got talking to Bob (aren't they all called Bob in America) and said 'you know Bob, the last time I was in the States I was 13.' He said to me 'oh really, was that business or pleasure?' [Laughs]

Did the long hours affect you?
Well, trying to sleep after a really long stint isn't actually as easy as it might sound, the brain is still racing, images still flash before your eyes and I'd have to open them again just to stop this happening. Just as important as thinking is to programming, is the skill to stop thinking and shut the body down. One of the problems I had with finishing the *Mega Apocalypse* star routine was I'd be completely mesmerised by my own code and would just stare at the screen for hours. Note: to recreate the effect in your home, load up *Mega Apocalypse*, press fire to start a game and then press Commodore key and Q simultaneously. I heard when I was up in London filming for *From Bedrooms To Billions* that one programmer had worked for three days solid and dropped dead, which isn't ideal.

Did you enjoy creating games for a living?
I suppose I have mixed feelings really, the bad side is the ridiculous number of hours working through the night and sometimes for days without sleep. Also not getting paid what one has been promised is another one, but worst of all is finding out your publishers are being sued and are not legally allowed to publish on that format at all.

However, on the plus side, I've worked for multi-billion dollar companies and been flown to Silicon Valley on business a couple of times. It's the excitement of the trade shows, the encouragement of fans and signing autographs. It's doing bits for TV and interviews with magazines. The thrill of being published, the challenge and the fun of the actual programming. Overcoming programming issues, pushing a computer further than anyone else. Meeting other terrifically talented people in the industry, sharing ideas and techniques... What can I say but 'wow'?

The Lucky Dime Caper Starring Donald Duck

DONALD CROSSES THE POND

» RETROREVIVAL

» Master System » Sega » 1991

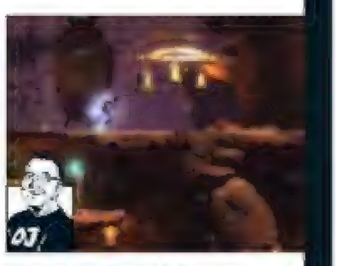
In the days before international communication became cheap and convenient, it was easy to miss out on what was going on elsewhere. You'd be aware of import games thanks to magazines, but it wasn't so easy to find out anything else. So, it came as a huge surprise to me when I got online and discovered that the Master System – the console that myself and all of my friends had owned as kids – was considered a failure in the USA. I also discovered that it was considered to have few good games, which seemed bizarre until I learned just what my American friends had missed out on. The likes of *Ninja Gaiden* and *Master Of Darkness* never reached their shores, so I'd often highlight great European releases.

Of all the games I highlighted in this endeavour *The Lucky Dime Caper* was one of the most frequently used, which is fitting as it's a game in which Donald Duck tours the world. Quite aside from being one of my favourite games when I was growing up, the game has that instant appeal that comes with a Disney licence. Donald Duck's game lived up to the standards that Sega had set for its Disney licences with *Castle Of Illusion*, and featured some excellently designed platform stages alongside the bright, bold visuals that characterised Master System games. A fair few people looked at the console differently after playing *The Lucky Dime Caper*. But that's to be expected – after all, great games are great games regardless of whether or not you caught them the first time around. ★

RETRORATED

>> After a lengthy wait, Just Add Water releases its update/ remake/reboot of Oddworld: Abe's Oddysee. We also take a look at Spaceman Dave, Table Top Racing, The Rhythm Of Fighters and Crazy Taxi: City Rush

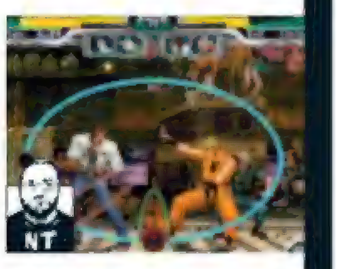
✱ PICKS OF THE MONTH



DARRAN

Oddworld: New 'N' Tasty

A superb update that re-imagines a classic game for a brand new generation of hardware.



NICK

The Rhythm Of Fighters

This is the best mobile game I've played in ages – it even references cult favourite *Cool Cool Toon*!

Oddworld: New 'N' Tasty

ABE AS YOU'VE NEVER SEEN HIM BEFORE

INFORMATION

- **FEATURED SYSTEM:** PS4
- **ALSO AVAILABLE ON:** PS3, PS VITA
- **RELEASED:** OUT NOW
- **PRICE:** £17.99
- **PUBLISHER:** ODDWORLD INHABITANTS
- **DEVELOPER:** JUST ADD WATER
- **PLAYERS:** 1

BRIEF HISTORY

» The original *Oddworld: Abe's Oddysee* was released in 1997 for PlayStation and PC. It was to be the first of a five-part series. Sadly, while *Abe's Exoddus*, *Munch's Oddysee* and *Stranger's Wrath* did appear, the final game never materialised.

It's hard to believe but we've actually seen people moaning online about the price of *Oddword: New 'N' Tasty*, arguing that £18 is too much money for "just a PSone game". The irony here of course is that this is not a cheap ROM dump, or a lazy HD update. No it's essentially a complete reworking of a PSone game, one that deserves to find success.

Let's make one thing perfectly clear though. *Oddworld: New 'N Tasty* is not a brand new game. There are no new gameplay mechanics to discover in Abe's latest outing and no additional levels that weren't in the original PlayStation hit. This is the same adventure/puzzle hybrid that delighted and confounded gamers 17 years ago. Except it's not the same game, not really. Okay, this is getting confusing...

The big difference between *New 'N' Tasty* and the PlayStation original is that Abe's adventure scrolls (relatively smoothly) compared to the flick-screen approach of the PlayStation original. This might not sound like a big deal, but it goes a long way to making the 17-year-old game feel fresh and new, as you work out how best to tackle each section. We've not discovered new ways to complete old puzzles, but everything now feels a little more organic. There are fewer surprises as well, as you can often see enemies before you're on top of them.

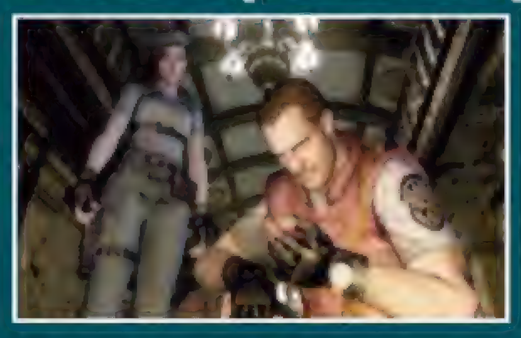
» [PS4] They look glorious, but sections with Elum do readily highlight the fluctuating frame rate.

The controls also feel improved. Yes they're far from perfect, with Abe not always feeling as responsive as he should be, but they do feel a darn sight better than those of the PlayStation original, allowing Abe more flexibility. There are still occasions where you'll question how you died, but in general, you'll often feel that the mistake made was yours and yours alone. Again, the new athleticism of Abe makes *New 'N' Tasty* feel like a new product – one created for today's market and not reassembled from 17-year old code.

It's the aesthetics where *New 'N' Tasty* really shines however. While its previous HD ports were a little more conventional, Just Add Water has gone

» [PS4] The cinematics have been greatly overhauled allowing you to really appreciate the stunning character designs.

More impressive updates to try...



Resident Evil

Yes there's a brand new HD remaster coming, but we bet our mother's teeth that it's not going to push the remaster envelope in the same way the original GameCube reboot did. Painstakingly rebuilt from the ground up, it's an astonishing piece of work that's still widely regarded (by us of course) as the best HD update ever.

Metal Gear Solid HD Collection

All of Bluepoint Games' remasters have been superb. It effectively takes the original texture and recreates them in a suitable resolution for the Xbox 360 and PS3, ensuring that the textures don't look washed out (an issue seen in many other HD collections that currently exist).

Final Fantasy X/X2 HD

More impressive work, this time by Square Enix. Like the *Kingdom Hearts* collection before it, many of the textures have been re-tweaked, making them far more suitable for today's HD sets. In fact the biggest issue we have with this value for money compilation is that Square decided against replacing Tidus's irritatingly annoying voice.

R-Type Dimensions

One of the greatest horizontal shoot-'em-ups of all time was giving a HD makeover in 2009. It's still a remarkable looking game and there's the ability to switch between the HD and original arcade graphics on the fly. The less impressive, and much tougher, sequel was also included and it's just been released on PlayStation 3 as well.

» [PS4] There are all manner of tricky puzzles to solve. How do you get past these guys?

out to deliver a truly gorgeous game, rebuilding the environments from the ground up and bringing them kicking and screaming into a HD-obsessed generation. The world Abe inhabits feels incredibly vibrant, weirdly juxtaposing with the oppressive, gloomy setting that powers *Oddworld*'s story. Character models look superb, with Abe and his many enemies feeling like plasticine models come to life. Environments also look impressive, recalling the feel of the original game, but looking all new and... well... tasty. The one downside to all this graphical splendour is that there are occasionally frame rate hiccups, which are most notable when controlling Elum (Abe's faithful mount) at high speeds. It's not a deal breaker, but it does take some of the shine off the presentation. Another problem that comes up is that it can sometimes be a little hard to separate backgrounds from foreground, meaning Abe can sometimes get killed by enemies or miss a ledge he can jump on to. We've also experienced a few annoying crashes. They're all irksome niggles that takes away from all the hard work that has obviously gone into the new engine.

And yet there's so many neat little touches that Just Add Water has added, that makes you wish other developers would take this loving approach to revisiting past classics. Speed runs were popular, so a leaderboard has been included; the game's brutally tough in certain sections, so you can activate a quick save whenever you want with a quick stab of the touchpad. They're not groundbreaking, but they show Just Add Water understands the game and the people that enjoy it.

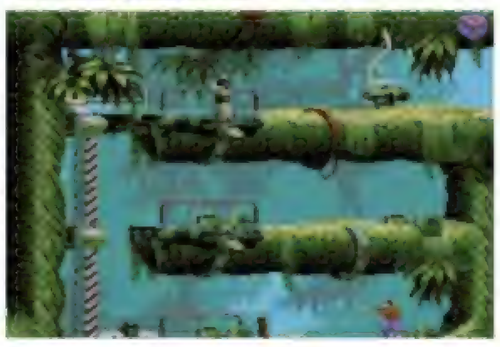
» [PS4] You'll need to communicate with many Mudokons in order to make progress.

» [PS4] Abe can get a number of powers, including the handy ability to blow up bombs.

★WHY NOT TRY

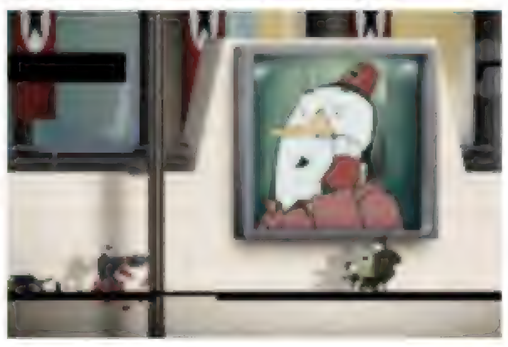
▼ SOMETHING OLD

FLASHBACK (MEGA DRIVE)



▼ SOMETHING NEW

ROCKETBIRDS HARDBOILED CHICKEN (PS3)



The original developer is still due praise though, as the core game is still brilliant. It's essentially a puzzle/adventure, with Abe having to negotiate sections using levers to activate traps and destroy the enemies found there. Along the way Abe has to save as many of his fellow Mudokons as possible. The number has been bolstered from 99 to 299, meaning you've quite the challenge ahead of you. Abe's only real form of attack is the ability to possess monsters, otherwise he has to keep on the run or sneak past his opponents. He can also communicate with his fellow Mudokons with a selection of whistles and farts. It was funny in 1997 and it's still funny now.

Just Add Water has taken a classic game and genuinely improved it for a new generation of gamers. Yes it has a few little niggles, but in terms of developers retouching their back catalogues, this is how everyone should be doing it.

In a nutshell

Just Add Water has done a remarkable job with this PlayStation classic, making it feel fresh and relevant for today's market. Now where's *Abe's Exoddus*?

>> Score 88%

RETRO ROUND-UP

>> Every month we look at all the classics and latest releases that are available to buy or download

★ PICK OF THE MONTH

The Rhythm Of Fighters

» **System:** Android (tested), iOS » **Cost:** £0.69 » **Buy it from:** Google Play, App Store

SNK has long had a habit of finding bizarre things for its *King Of Fighters* characters to do, putting them in everything from shoot-'em-ups to board games.

The latest endeavour crosses rhythm-action with fighting, though it's much heavier on the rhythm-action side. If you're familiar with the Dreamcast import *Cool Cool Toon*, you'll recognise what's going on here – distorted outlines close in on circles around the oval playfield, and you need to tap the screen when they meet. Other notes see you holding a tap or swiping in a specific direction.

As you play, your chosen character fights the likes of Terry Bogard, Nakoruru and Kyo Kusanagi. Successfully keeping time with the music allows your character to block incoming attacks and do some damage of their own. If you're struggling, the game offers support characters that can deal extra damage, recover health and even allow chains to continue through missed notes. There's a clash of styles during the fights as sprites and backgrounds from a variety of games are mixed and matched, but you'll barely notice this during the heat of play.

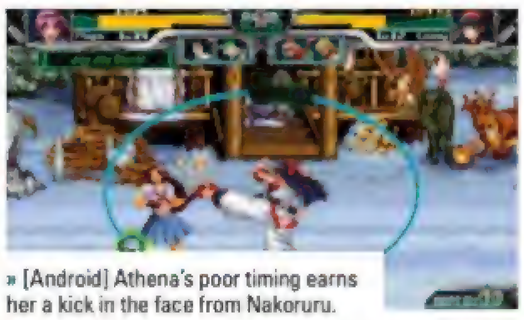
At a time when many mobile games aggressively push their microtransactions, it's nice to see that SNK has taken the opposite approach, offering a good game for a low price and hoping you'll buy the additional content. You get a generous helping of game for the initial outlay, with 14 tracks drawn from games including *The King Of Fighters XIII*, *Cool Cool Toon* and *Metal Slug Defense*. There's also an arcade mode which contains a variety of challenges such as knocking out a certain number of fighters or obtaining a set chain. Additional track packs focus on specific games and cost more than the basic game itself.

With solid mechanics and a well-judged difficulty curve that prepares you for harder tracks, this is a surprisingly good rhythm-action game. If you're a fan of the music in SNK games this is an easy recommendation, but it's accessible enough that everyone should have some fun with it.

90%

» [Android] The difficulty curve provides a gentle introduction for newcomers.

» [Android] Characters have different skills, with Athena excelling at chains.



» [Android] Athena's poor timing earns her a kick in the face from Nakoruru.

» [Android] This Cool Cool Toon stage pays homage to the game's inspiration.

Crazy Taxi: City Rush

» **System:** iOS (tested), Android
» **Buy it for:** Free (in-app purchases)
» **Buy it from:** App Store, Google Play

Crazy Taxi may have been turned into an endless runner, but it still *feels* like a *Crazy Taxi* game. There are three large areas to explore, plenty of challenges to master and the ability to constantly upgrade and pimp your ride. While it lacks the mini-games and hidden customers of the arcade originals, it retains the 'just one more go' factor that made the arcade and Dreamcast games so addictive in the first place. What a pity, then, that all the thrills and spills are locked behind an IAP pay wall. Admittedly, it's nowhere near as bad as some we've encountered, but it's frustrating having to constantly wait to play a new game. It's also annoying being bombarded with videos every time you finish a drive. It's great fun, but a frustrating overall experience all the same.

51%

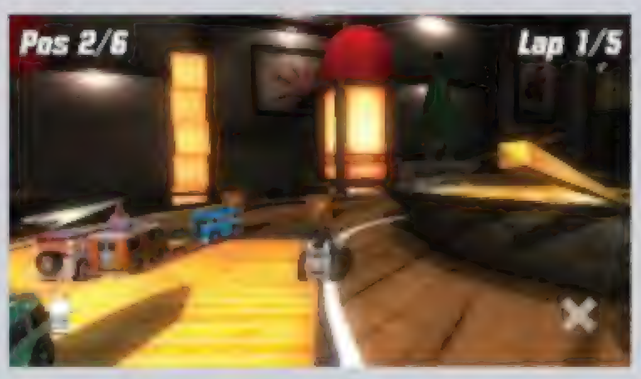
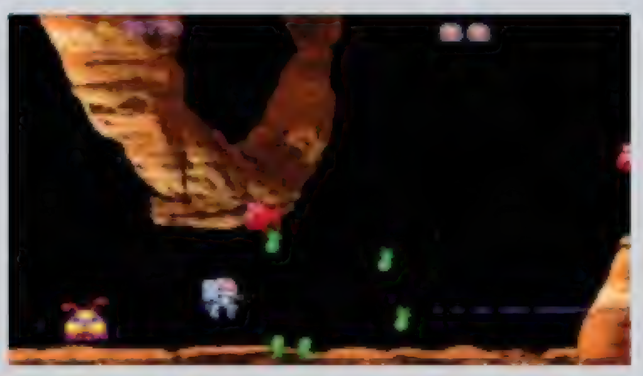


Table Top Racing

» **System:** PS Vita
» **Buy it for:** £4.99
» **Buy it from:** PSN

Table Top Racing's variety is staggering. Standard races, hot laps, eliminations, chasing down a fleeing car and weapon-based races are just a few of the modes on offer, ensuring there's plenty to do. While rubber banding ensures the single-player games remain close and competitive, the multiplayer felt strangely lacking – sterile even. The small variety of power-ups and inability to throw them behind or in front of you kills any possible strategy, while ad hoc felt sluggish and buggy (two of us finished first in one game). There are IAPs as well, but luckily we never had to use them. *Table Top Racer* is certainly enjoyable, but considering the heritage (the team has worked on numerous racing games) it lacks the excitement of the games it's trying to emulate.

65%



Spaceman Dave

» **System:** iOS
» **Buy it for:** £0.69
» **Buy it from:** App Store

Imagine a cross between *Flappy Bird* and *Flicky*, with a dash of Jeff Minter thrown in and you'll have a good idea of what to expect from *Spaceman Dave*. Dave continually bounces along the screen, dodging enemies and collecting aliens. Pressing the left side of the screen determines your altitude, while hitting the right side fires your lasers. It's an elegant system and a surprisingly responsive one thanks to the game's tight collision detection. You're rewarded with bonus points for saving aliens, but will get shot if you reach the end of the stage without any. While things start relatively easy, the later levels pile the enemies on meaning you'll have to do plenty of weaving and shooting if you want to save your green friends. An entertaining little blaster.

76%

Welcome back to the golden age

RETRO COLLECTIONS

Revisit the games, films, shows and hardware that defined entertainment for a generation

BUY YOUR COPY TODAY

Print edition available at www.imagineshop.co.uk

Digital edition available at www.greatdigitalmags.com

Available on the following platforms

Print Tablet Phone Desktop

facebook.com/ImagineBookazines twitter.com/Books_Imagine

Welcome to Homebrew

» One thing I found surprising was the controversy over the ZX Evolution games for Your Game 5; granted they probably shouldn't be archived as Spectrum releases at sites like Pouet because the machines themselves are more than Spectrum clones, but at the same time I'm surprised by the drama

» [ZX Evolution] The number you have dialled...

FROM RUSSIA WITH LOVE

Devs go head to head on the Spectrum and its clone

The fifth instalment of the Your Game competition has recently finished, with eight complete games and two previews being released over a range of genres at the DiHalt demo party held in Nizhny Novgorod, Russia. And there's also some variety of platforms amongst those games too because, alongside the regular 128K releases to be expected from what is usually a Spectrum-specific event, there's been significant support shown for the expanded Spectrum clone, the ZX Evolution, as well.

Starting with the three Spectrum-compatible games, there's a word-based puzzler in Russian called *Sexwords* which at least looks less dubious than it sounds, a *Minesweeper*-style game called *Mine* and a conversion of Westwood Studios' landmark RTS *Dune 2* which has existed as a preview since the mid-Nineties but is now released in its complete form. For the ZX Evolution there is another rendition of tricky number puzzle *2048*, which is accompanied by shoot-'em-up *ASCII Invaders*, a conversion of the Amstrad CPC scrolling blaster *Edge Grinder*, some platforming action from *Zooming Secretary* and an improved version of the Mojon Twins' Spectrum title *Ninjajar*, which is arcade-oriented but with *Dizzy*-style character interaction.

The previews are also both for the ZX Evolution; one is a beat-'em-up called *Retro Kombat* which lets two players choose their fighter from either Mario, Sonic or Dizzy for some hand-to-hand brawling while the other is *Space Mercenary*, a 3D dungeon crawler set in a science fiction environment. All of the entries can be downloaded in a single archive from the World Of Spectrum forum thread linked to by Kikstart.eu/your-game-5-spec and they come shipped with a pre-configured emulator to handle the TR-DOS disk images.

> "There's been significant support shown for the Spectrum clone"

Incoming

This month we like the look of a GBA shooter, a throwback to the World Cup and more...

KIKSTART.EU/SHOOTERTHING-GBA

▲ *Shooterthing 50%* is a preview for the Game Boy Advance – it won't be finished but can be played as is.

▼ We're a bit late mentioning it, but *FIFA World Cup 2014* is available in unlicensed form on the VIC.

KIKSTART.EU/FIFA-2014-VIC

KIKSTART.EU/IMMENSITY-PRV-C64

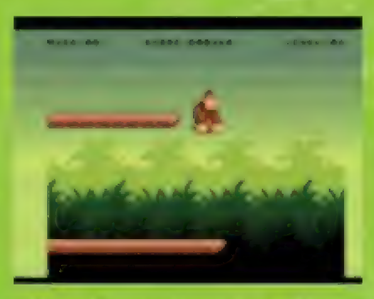
▲ It's still only a playable preview at the moment but *Immensity* on the C64 is looking extremely promising.

NEW GAMES NEEDED

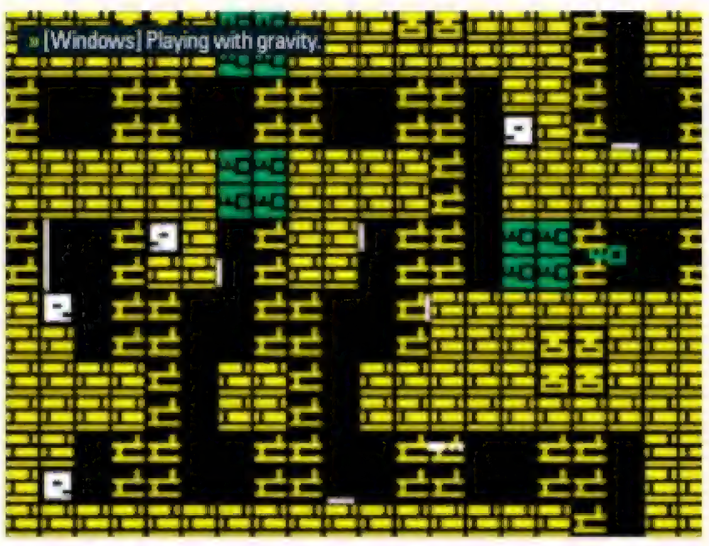
If you have a homebrew project you would like to see featured then please contact us at:
retrogamer@imagine-publishing.co.uk

MAKING A MONKEY

Released at the Solskogen demo scene party alongside a revised version of his Amiga *Flappy Bird* conversion, Michael Gibs' latest is *Donkey Downfall* which is a *Man Goes Down*-style game where Donkey Kong must safely fall between platforms as they move up the screen without disappearing off either the top or the bottom. Head to kikstart.eu/donkey-downfall-amiga for a download – linking to Pouet.net – which is being referred to as a 'party version' so a more fleshed-out game with some extra items like the existing *Downfall* for the Amiga may be coming later.



[Amiga] Cats are always yowlin'.



[Windows] Playing with gravity.

SHIFTING GEARS

There are many current games trying to look 'retro' in some form, but *The Gears Don't Grind* takes things a few steps further with some minimal graphics and sound. This is a tough action-puzzler where the levels are filled with hazards blocking the exit and items to work with, but it also offers an unusual quirk; the gravity and controls will change as the player wraps around from one side of the screen to the other, so jumping in one direction can suddenly translate to falling in a completely different one! Kikstart.eu/gears-grind-win for the download.

▼ Time for a little single or, preferably, multiplayer shooting in *Leovigildo's Murcian Conspiracy* for the Mega Drive.

KIKSTART.EU/LEOVIGILDO-MD

Homebrew heroes

FloodIt for the Commodore 16 is a fiendish puzzler developed by Csaba Pankaczy, and we wanted to know a little more about how it came to be

Where did the idea for *FloodIt* come from originally?
Earlier this year I released a similar game called *2048*. I got a short email from my good friend Chronos, which went along the lines of 'I found a small game similar to *2048*, do you feel like porting this one too?' along with a link to the JavaScript version of the game. I checked it out and decided to do it, because it looked like a fun exercise.

How long did it take to create from start to finish?
I'm not good at recording (or remembering) how much time I put into my projects, but in this case I do have a record I could look up. From the email I mentioned above until release was eight days, so basically some afternoons and evenings over an eight-day period. The original game has only random levels but I wanted to add something that can be completed, therefore I came up with the Tournament mode. What took a bit more time was writing the companion utility in which can check which boards could definitely be solved in the given number of steps.

Overall, writing the game was quick and simple. Using PETSCII meant no need for complex graphics, with music and sound not being needed for this type of game in my opinion.

[Plus/4] Very brown, isn't it?

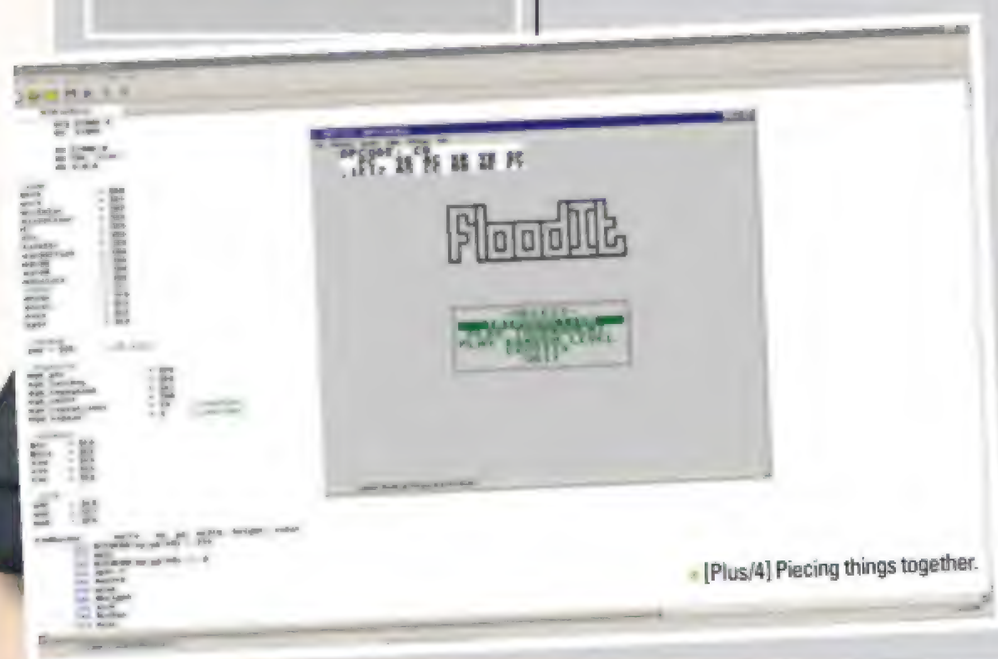
Have you received any feedback from players?
Yes! Remember that the C16 and Plus/4 scene is very small: I got five comments on the Plus/4 World forums – Kikstart.eu/floodit-264-feedback – and two emails. I'd call that a success.

And is there anything in there that you would want to change in hindsight?
The forums keep record of the fact that the original release unfortunately had a bug (the routine that kept score never incremented the thousand digit). I did send a release candidate out to two friends before making it public. Neither of them responded, and I took this as a sign that the game is good to go. So, the only thing I'd change in hindsight is this, I should have been more careful. Otherwise I'm happy with it.

Do you have any other plans that our readers would be interested in?
I don't want to announce anything that might not come to fruition, but let's just say I got another email from Chronos...

And finally, would you consider porting *FloodIt* to other platforms?
No, not really. The idea of programming on other platforms did occur to me in the past, but it's just a passing curiosity. There's so much to do on the C16/Plus4 that I'd rather stick with that. Otherwise, if anyone wanted to port it, it should be simple: the JavaScript version I mentioned above has the source code released, and my game has its full source released as well.

[Plus/4] Running out of moves.



[Plus/4] Piecing things together.

REVIEWS

MSXDEV 2014

» **FORMAT:** MSX » **DEVELOPER:** VARIOUS
» **DOWNLOAD:** KIKSTART.EU/MSXDEV-2014 » **PRICE:** FREE

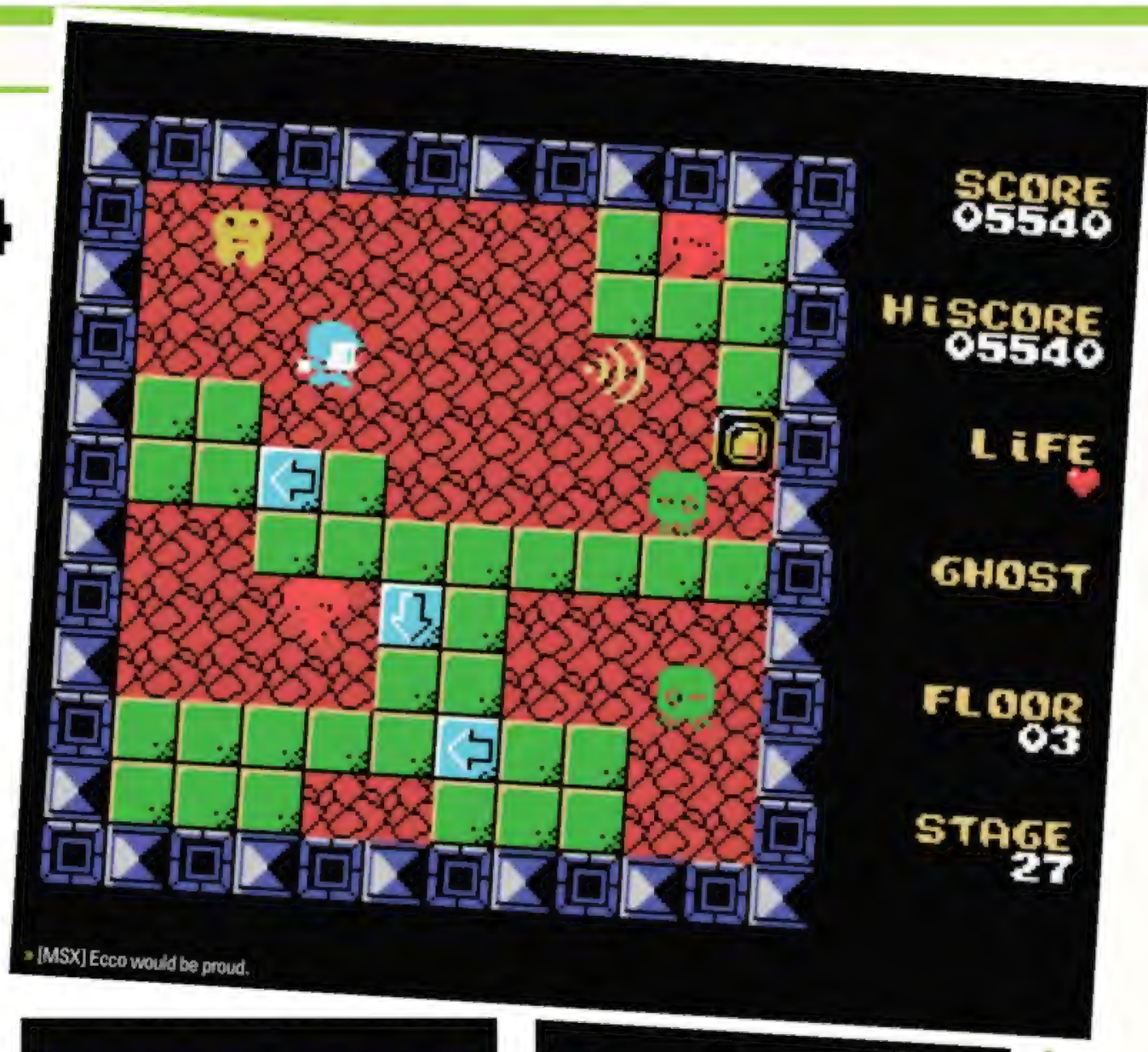
Each year the MSX community comes together to produce games for the MSXdev competition. This year the winner was *Pretty Kingdom* which stars the brave warrior Vincent who resembles Pocoyo on-screen and is on a quest for fame and fortune which leads him to the tower of Mozabar, its fabled unique treasure and floor after floor of nasties waiting to stop him from claiming it. More action puzzling came in the form of *Gorgeous Gemma In Escape From The Space Disposal Planet* which is side-view, and has gravity to contend with while *Zero And The Castle Of Infinite Sadness* features in some *Amidar*-style painting of the levels.

Fans of classic arcade action have a few options to choose from; *Jawbreaker 2* is a port from the Texas TI-99 of Sierra's *Pac-Man*-inspired maze game, fans of *Frogger* might want to try *Libreway* since its a conversion of the chicken-flavoured *Freeway* from the Atari 2600, *Mr Cracksman* takes the frenetic gameplay of classic coin-op *Head On* and builds on it with a cops and robbers theme and *Destroyer* is a traditional *Galaxian*-style gallery shooter which even wants the screen rotated 90 degrees for that authentic arcade feel!

Also in the blasting camp is *Nayade Resistance*, a demanding horizontal shoot-'em-up which reminded us of other MSX games with per-character scrolling – the *Gradius* series and MSXdev 2005 entry *Universe: Unknown* in particular – but with on-screen messages sent by another character to aid the player which must be followed to survive. Then there's the primitive isometric shooter *CMJN* – which the author describes as "experimental" – and the port of *Uridium* we mentioned last issue, which isn't an exact copy but does manage to get pretty close while also being gorgeously smooth.

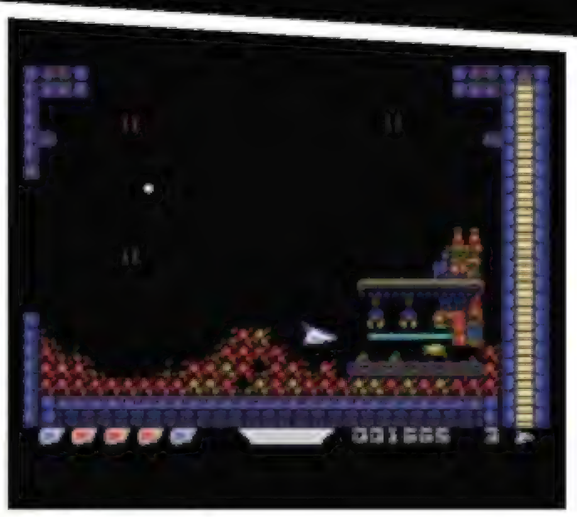
Some of these titles are weaker than others but that's to be expected from any set of competition entries and the overall standard is high, with the top three titles *Pretty Kingdom*, *Uridium* and *Mr Cracksman* all being very solid. Most gamers should find something of interest to play.

86%



» [MSX] Ecco would be proud.

» [MSX] You'll never take me alive, copper!

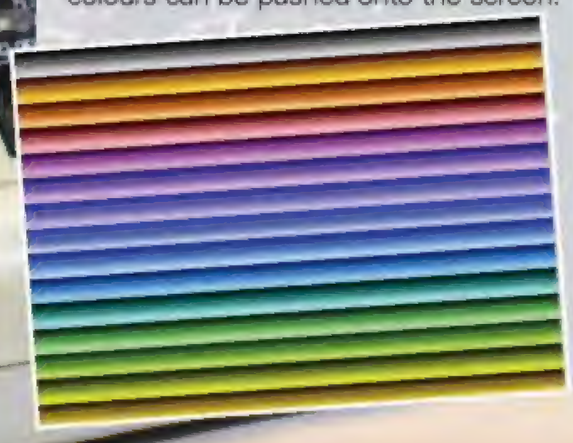

» [MSX] Must... resist!

Make this

Every month our very own Jason Kelk will be teaching you handy new programming techniques. This month: splitting colours

NEW

1 The colour split most people will recognise is the classic rainbow used extensively on the Atari 8-bit. It works by writing to the background colour once per scanline, relying on the Atari's WSYNC feature to time each colour change perfectly so all 128 colours can be pushed onto the screen.



2 This idea has been expanded on over the years and used to great effect for presentation screens; with the Commodore 8-bits the character set can be inverted and the background colour split to make bars move through the text.

3 And with some planning and a spot of tricky raster timing, splits like these can also be used during the game itself, either to make the horizon in *Lunar Blitz* on the Atari 8-bit machines again or to add colour to other playfield elements.

4 Although getting colour splits out of a Spectrum is harder, it is possible to write to the attributes rapidly in order to get a game like *Buzzsaw+* working. There are even engines online like Bifrost to make writing colourful Spectrum games easy.

JUNKBOTS

» **FORMAT:** MEGA DRIVE » **DEVELOPER:** @SLAPMYBITSUP & @MOONWATCHERMD
» **DOWNLOAD:** KIKSTART.EU/JUNKBOTS-MD » **PRICE:** FREE

There's a conspiracy afoot, the theme for the BitBitJam online competition has been manipulated! Evidence that will expose the culprits has been split into half a dozen pieces and hidden over the same number of levels, so the heroic Leobot must dig around to find them; collecting an item moves him onto the next level, but if his evil counterpart gets to it first the game ends.

The problem is that *Junkbots* just feels unfinished, not so much in the sense that it offers what amounts to just one stage with some randomly scattered blocks – that can work if the gameplay is solid – but more because the design itself is fatally flawed. All six stages have to be completed without dying which, considering the randomness of the levels and enemy movement, is an almost soul-crushingly difficult task. We can't even recommend this one to the more masochistic players reading.

33%

» [Mega Drive] Work up a lather.

ALTER EGO

» **FORMAT:** COMMODORE 64 » **DEVELOPER:** RETROSOULS » **DOWNLOAD:** KIKSTART.EU/ALTER-EGO-C64/ » **PRICE:** FREE

Originally released on the Spectrum by developer RetroSouls in 2011 and since converted to other platforms, *Alter Ego* is a puzzle game where a little man is being haunted by an apparently benign ghost. Between the two of them they must collect items dotted around each level without being killed or becoming stuck. The two can also swap places a limited number of times which, since the ghost responds in reverse to one of the player controls, makes reaching otherwise inaccessible places possible.

This game really doesn't take advantage of the Commodore 64's sound – it'll be worth putting something else on in the background while playing – and the graphics are a little fiddly but, as with the other versions of *Alter Ego*, the puzzles are cleverly designed with just the right level of frustration to keep players coming back for more.

81%

» [C64] To me, to you.

POWER RANGERS: BEATS OF POWER

» **FORMAT:** WINDOWS » **DEVELOPER:** MERSO X » **DOWNLOAD:** KIKSTART.EU/PR-BOP-WIN » **PRICE:** FREE

The original six teenagers with attitude are back to thwart Lord Zedd's plans for world domination. *Power Rangers: Beats Of Power* takes many cues from the console game *Mighty Morphin Power Rangers: The Movie* but isn't a direct remake, instead it picks and chooses elements and uses them to tell a more general *Power Rangers* story. The player selects a teen and takes on the Putty Patrol, morphing with Alpha's help during the stage to tackle the larger monsters and, when Zeddy makes them grow, calling in a Megazord.

The graphics are based on the 16-bit consoles, but the audio has been beefed up, using music and speech sampled from the show itself and, when it's morphing time or a Megazord needs to be formed, the game pauses to play a video clip. There could be a bit more variety, but *Power Rangers* fans should have a blast.

78%

» [Windows] Thunder Megazord power!

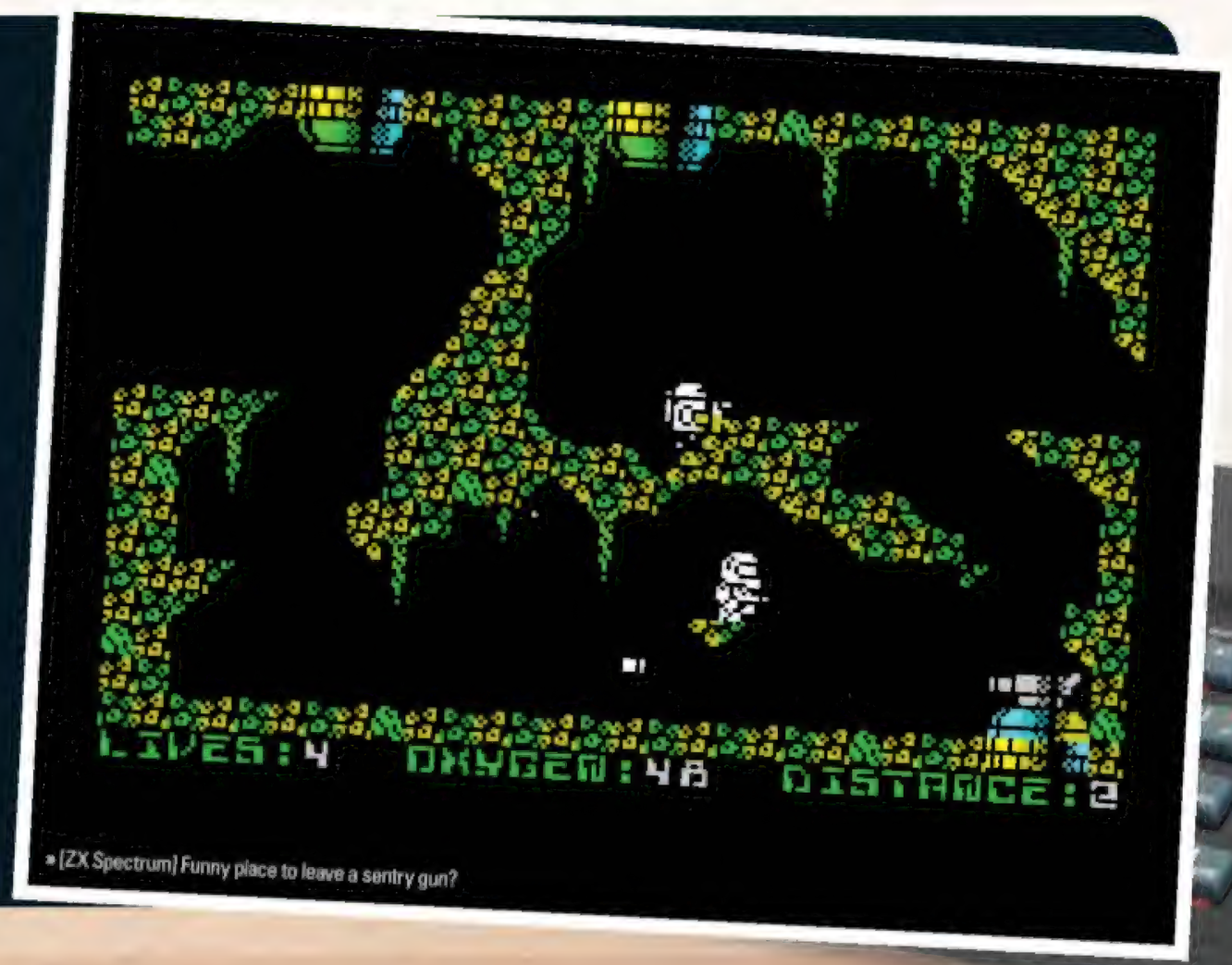
KYD CADET 3

» **FORMAT:** SINCLAIR SPECTRUM » **DEVELOPER:** PAUL JENKINSON
» **DOWNLOAD:** KIKSTART.EU/KYD-CADET-3-SPEC » **PRICE:** FREE

A previously unknown force has attacked the Eyeburx home planet and, after some investigation, the now fully-trained hero Kyd Cadet has found evidence of an impending attack from the trigger-happy Driodand people. With no time to even send a report back to his superiors our hero must take the fight to the Driodand planet, picking up a pulse rifle to defend himself along the way.

The addition of a weapon and the oxygen gauge that can be topped up by the air tanks scattered around the game means that *Kyd Cadet 3* plays slightly differently to its predecessors. The mission is also less about exploration, instead focusing on an *Exolon*-style fight through the Driodand stronghold to their central computer before giving it a serious reprogramming with your gun. As with previous Paul Jenkinson games this plays well and looks superb, cramming lots of gameplay into an Arcade Game Designer title.

88%



» [ZX Spectrum] Funny place to leave a sentry gun?

MAILBAG

WIN!

Get one of these awesome novelty hip flasks, courtesy of www.funstock.co.uk. You'll never go thirsty again!

HAVE YOUR SAY... SEND US A LETTER OR MAKE YOURSELF HEARD ON THE ONLINE FORUM – **WWW.RETROGAMER.NET**

THE TROUBLE WITH TROPHIES

Dear **Retro Gamer,**

Having recently returned to some of my older PS3 games to gain outstanding Trophies, I was dismayed to find that EA has stopped online play for many of its titles, including *The Lord Of The Rings: Conquest*. This was one of the first PS3 titles I purchased and although I successfully completed the solo Good and Evil campaigns, I had hoped to finish my Trophy collection online, too.

If companies like EA Games are going to cancel online play, the least they could do is award loyal players the set of online Trophies so that we at least have a realistic chance of gaining the Platinum one, too!

Stuart Hardy

» [Dreamcast] As online services close, games like *Phantasy Star Online* have to rely on unofficial server software

This is an ongoing problem we're going to struggle with in years to come – as online integration becomes a standard feature, older games are inevitably going to become less functional as the years go by and services are closed.

In some cases, like with *Phantasy Star Online*, fans have stepped in to fill the void with new server software. Unfortunately this won't be feasible for all games, and even if it happens the critical mass of population that makes them worthwhile may be impossible to replicate. It's sad to say, but we face the possibility that landmark games like *World Of Warcraft* won't be playable in the future.

As for your Trophies, we can only hope that there are some technically-minded fans out there that will eventually allow you to claim that Platinum.

ELEVATOR ACTION

Hi **Retro Gamer**!

I used to play a game with the kid next door, but I can't remember what it was and I was hoping you could help. The only things I can remember are that he was the only kid in the neighbourhood who didn't have a NES, and the game was kind of like *Metroid* but you rode an elevator. I'm pretty sure it was a console game, too. Any ideas?

Chad Miller

» [Master System] *Zillion* is a bit like *Metroid*, but it's way more upbeat – check out that music!

"Seeing the likes of Jet Set Radio in isometric form surely has to at least be worth a look"

From the sounds of it, it's probably *Zillion – Impossible Mission* also had an elevator but was unlike *Metroid* in that you couldn't shoot anyone, so we're going with the Master System game here.

STAR LETTER

GAME FOR GAME BOY?

Hi **Retro Gamer,**

I really enjoyed seeing *Final Fight One* as a Reader Revival in issue 132, mostly because I think **Retro Gamer** needs to show a bit more love for the Game Boy Advance. The system's old enough now and really kept the 16-bit 2D style alive when all the home consoles had moved on.

Many of the games have retro gaming connections, from the big titles like *Metroid Fusion*, *Mother 3* and *Advance Wars*, right down to the lesser-known games like *Rebelstar: Tactical Command* and *Shining Soul*. Plus, its conversions of home console games offer an interesting insight into how big franchises might have looked if they'd started out on hardware that was a little more humble. Seeing the likes of *Jet Set Radio* in isometric form surely has to at least be worth a look.

If it comes to the worst, you can always get a Game Boy Player and a pad adapter so you can pretend you're playing a SNES or something. So what do you say – is more Game Boy Advance coverage on the cards?

Jamie Roberts

We're certainly at the point where we're starting to look at running deeper coverage on the system and its games, as it was a staggeringly popular system which fits right in with the retro aesthetic. It's also not been a going concern for some time, thanks in no small part to Nintendo's decision to release a successor less than four years after it launched.

There are some very interesting stories to tell and the system itself has a lot of classic games available, so it's highly likely that the coverage will become more regular as time goes on. Now, if you'll excuse us we need to go away and track down some of the people behind *Ninja Cop*...

» [GBA] Is *Ninja Cop* the kind of game we should be featuring more in **Retro Gamer**? Jamie Roberts thinks so

MAKING IT HAPPEN

Hi **RG,**

Just wanted to write in to say thanks for providing so many great memories with your magazine, and helping me to appreciate things about games that the eight-year-old boy at the time didn't really understand.

One of the great things is it harks back to the magazines I bought as a kid. I grew up with *Zzap!*, *Commodore Format* and then *Amiga Format*, and it was exciting each month reading about the new things coming out. I suppose now it's exciting each month reading about old things I'd never discovered

Don't forget to follow us online for all the latest retro updates

RetroGamerUK @RetroGamer_Mag

CONTACT US

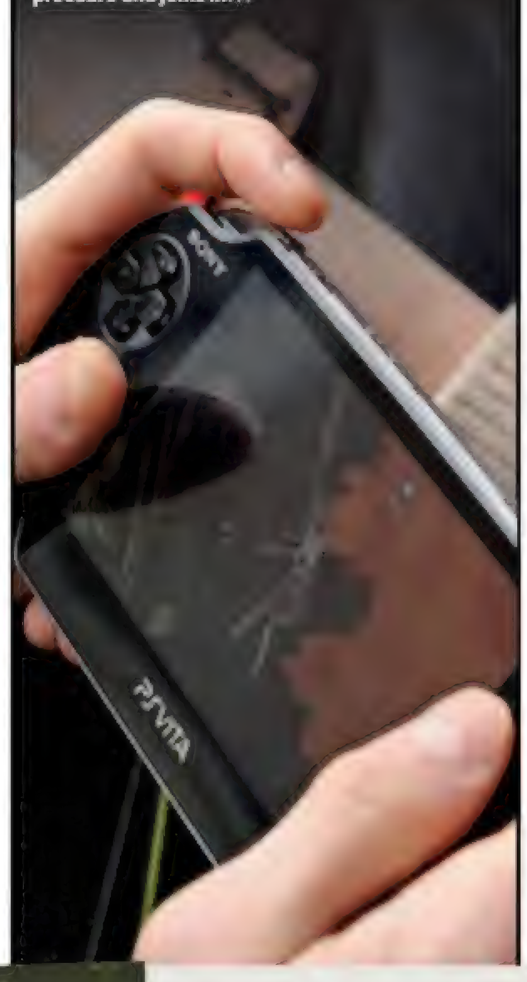
Snail Mail: Retro Gamer, Imagine Publishing, Richmond House, 33 Richmond Hill, Bournemouth, Dorset, BH2 6EZ

Email: retrogamer@imagine-publishing.co.uk

DISCUSSED THIS MONTH

The Vita Club

Lunchtimes in the Retro Gamer office are currently being dominated by the PlayStation Vita thanks to the recent release of *Rogue Legacy*. Darran, Steve and Nick are all in, and are joined by colleagues on Play and NowGamer. It's only a matter of time before Jon succumbs to peer pressure and joins in…



or had forgotten about. I did always wonder a few things though, and would be grateful if you could answer them.

How does the review process work? I always wondered this, because I would play a game for ages, and more often than not get very far through the game. Do you have to be exceptionally good at the games, or do you get cheat codes etc so you can experience it all the way through? Do you have an allocated amount of time you play for, or do you play until you've completed it/seen enough?

Back in the day, did you pick and choose which games to review, or was it something the publishers would push to you? How did you get the screenshots back then? I remember trying to take a photo of my TV screen, but that never worked. Obviously these days it's a bit easier…

When you are play-testing the retro games these days, do you do so on original hardware?

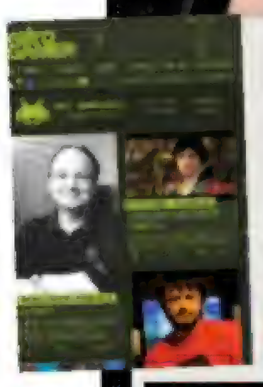
Richard Tappenden

Hi Richard, we're pleased to hear that you're enjoying the magazine. We can't speak for how things have worked elsewhere, but we always have a deadline for reviews.

» [GX4000] On the rare occasion we fancy a blast on *RoboCop 2*, we have the original hardware to facilitate that.

Some games can be completed within that time, but lengthy ones like RPGs can typically take a little longer to finish. We tend to be pretty good at games, too – playing them as part of your day job helps with that.

We keep original hardware from retro essentials like the Spectrum and Mega Drive right down to the likes of the Amstrad GX4000, to use in the office as often as possible – it's still great fun digging out the old hardware. Incidentally, old magazines tended to use photos taken in a darkened room before it became possible to grab screenshots from the video output – you can often see the curve of an old CRT screen in issues of *C&VG*!



From the forum

» www.retrogamer.net/forum

Every month, Retro Gamer asks a question on the forum and prints the best replies. This month we wanted to know…

Your favourite turn-based strategy game

The Laird

Viking Raiders by Firebird on the Spectrum, looks primitive by today's standards but it was the first one I ever played and still love it!

RodimusPrime

The original *Civilization*, wonderful wonderful game. Only turn-based stategy game I really got into apart from *Advance Wars* and *Transformers G1: Awakenings*.

HalcyonDaze00

Laser Squad, *Breach 2* and *X-COM* are the three outstanding choices, wouldn't like to separate them, but if forced, then *X-COM* is the winner.

ncf1

Stratego. (Almost) as good computerised as the board game itself.

paranoid marvin

Theatre Europe. Having to ring a real telephone number in order to get the correct code to authorise use of nuclear/chemical weapons made this game eerily realistic.

markopoloman

Star Trek: The Next Generation – Birth Of The Federation. Amazing game – found the CD last year but couldn't get it to work on a modern PC. God I really want to find a working copy and play it RIGHT BLOODY NOW!

Mayhem

Choices, choices… gonna plump for *Laser Squad*, the precursor to *X-COM* arguably, an excellent game and scenario setter in its own right, and a game you could practically do anything in, like hide live grenades in plant pots.

joefish

Carnage Heart on the Playstation – the wargaming was a bit crude, but designing and programming your own combat robots was brilliant.

ianpmarks

Rebelstar Raiders, I lost weeks (and possibly a couple of 0 levels) to that game.

psj3809

Rebelstar Raiders on the Speccy – played it so much, different tactics, all leg it through the same door, or split up. Worked so well. Decent skill levels to choose from for the computer as well, had many great battles in that game with some exciting finishes.

clarance

The *Advance Wars* series is very good, especially the GBA games, but original *Civilization* is still my favourite.

Megamixer

Series-wise it would have to be the epic *Fire Emblem*.

retro GAMER

Imagine Publishing Ltd
Richmond House, 33 Richmond Hill,
Bournemouth, Dorset, BH2 6EZ
+44 (0) 1202 586200
Web: www.imagine-publishing.co.uk
www.retrogamer.net
www.greatdigitalmags.com

Magazine team

Editor Darran Jones
retrogamer@imagine-publishing.co.uk
01202 586237
Editor in Chief Ryan King
Senior Designer Jonathan Wells
Staff Writer Nick Thorpe
Production Editor Steve Holmes
Photographer James Sheppard
Senior Art Editor Andy Downes
Publishing Director Aaron Asadi
Head of Design Ross Andrews

Contributors

Adam Barnes, Mike Bevan, Richard Burton, Martyn Carroll, David Crookes, Paul Davies, Paul Drury, Andrew Fisher, Jason Kelk, Graeme Mason, Rory Milne, Sam Smith

Advertising

Digital or printed media packs are available on request
Head of Sales Hang Deretz
01202 586442
hang.deretz@imagine-publishing.co.uk
Account Manager Anthony Godsell
01202 586420
anthony.godsell@imagine-publishing.co.uk

International

Retro Gamer is available for licensing. Contact the International department to discuss partnership opportunities.
Head of International Licensing Cathy Blackman
+44 (0) 1202 586401
licensing@imagine-publishing.co.uk

Subscriptions

For all subscription enquiries
email retrogamer@servicehelpline.co.uk
(UK) 0844 848 8412
(Overseas) +44 1795 592 872
13 issue subscription UK – £51.90
13 issue subscription Europe – £70
13 issue subscription ROW – £80

Circulation

Head of Circulation Darren Pearce
01202 586200

Production

Production Director Jane Hawkins
01202 586200

Founders

Group Managing Director Damian Butt
Group Finance & Commercial Director Steven Boyd

Printing & Distribution

Printed by Wyndeham Heron Ltd, Bentalls Complex, Colchester Road, Heybridge, Maldon, Essex, CM9 4NW
01621 877 777

Distributed in the UK, Eire & Rest of the World by: Marketforce, Blue Fin Building, 110 Southwark Street, London, SE1 0SU
0203 148 3300
www.marketforce.co.uk

Distributed in Australia by: Network Services (a division of Bauer Media Group), Level 21 Civic Tower, 66-68 Goulburn Street, Sydney, New South Wales 2000, Australia
+61 2 8667 5288

Disclaimer

The publisher cannot accept responsibility for any unsolicited material lost or damaged in the post. All text and layout is the copyright of Imagine Publishing Ltd. Nothing in this magazine may be reproduced in whole or part without the written permission of the publisher. All copyrights are recognised and used specifically for the purpose of criticism and review. Although the magazine has endeavoured to ensure all information is correct at time of print, prices and availability may change. This magazine is fully independent and not affiliated in any way with the companies mentioned herein.
If you submit material to Imagine Publishing via post, email, social network or any other means, you automatically grant Imagine Publishing an irrevocable, perpetual, royalty-free license to use the materials across its entire portfolio, in print, online and digital, and to deliver the materials to existing and future clients, including but not limited to international licensees for reproduction in international, licensed editions of Imagine products. Any material you submit is sent at your risk and, although every care is taken, neither Imagine Publishing nor its employees, agents or subcontractors shall be liable for the loss or damage.

© Imagine Publishing Ltd 2014

ISSN 1742-3155

IMAGINE PUBLISHING

recycle

Retro Towers

Dan Hunter tells us about his online website that started off life as an eBay store

When did you originally set up Retro Towers?
Retro Towers was first set up in 2011. Originally it was just an eBay store selling AV cables for a small selection of retro game consoles, but as time went on in April 2012 I decided to start an online store and started selling a wider variety of products.

What's your favourite games console and game?
It has got to be the Nintendo 64 and the game is *Super Smash Bros.* It was mind blowing the first time to see all of those different characters in the same game.

What do you specialise in?
We specialise in aftermarket retro gaming products that can enhance the retro gaming experience. The main products are flash carts, RGB SCART cables, region converters, clone consoles, game adapters, multi-carts and others. RGB scart cables can enhance the picture and audio quality to the best it can possibly be with systems made before the Dreamcast. Region converters allow you to play imported games on your consoles and some of them also allow you to load Action Replay cheat codes. Clone consoles are videogame consoles that are copies of older ones, but look different and usually have a few compatibility issues. The most common clone consoles are clones of the NES. Game Adapters will let you convert the games the console can play from one to the other. They are normally made for the SNES and will allow you to play Game Boy Advance or Mega Drive games on it.

What sets you apart from other online stores?
We search all over the internet for new retro gaming products that are mainly made by gamers for gamers. We usually get products that aren't very well known before we start selling them and then try to promote them.

What are usually your most popular products?
The most popular products are the Everdrive line and other flash carts. They let you play backups of your games through SD cards on your original game systems. It isn't emulating anything and is using the real hardware, so the gameplay would be exactly the same as it would be if you were playing the game on the console. They are amazing pieces of kit.

Tell us a little bit more about your reward service.
When a customer signs up for an account they will receive some reward points and these reward points can be redeemed when buying a product to reduce the total price of the product. The primary way of getting more points is when you buy items. Every time you spend £1 you will receive ten points.

» Dan doesn't have a physical shop, instead operating Retro Towers via an online website.

Why use crypto currencies?
Where do I start? There are so many reasons for why we use crypto currencies. The fees are a lot lower than PayPal, or other credit card processing methods. It also allows for people to order products from us in countries where PayPal either doesn't operate, or is harder to get an account with. It can also help with promoting the store, because there is a growing community of crypto currency enthusiasts and people within the community often like to promote stores that accept crypto currencies. I believe that crypto currencies are still in their infancy at the moment and will grow to be a lot more popular than they are now.

Why do you focus on hardware?
The main reason for this is that it is very hard to find retro games at prices that are low enough to make a profit from reselling them. The car boot sales and charity shops nearby never seem to have any retro games. With hardware it is a lot easier to order more when they are all out of stock. With videogames this could take weeks or months to find another copy of a game that was sold. ✱

» A selection of some of Retro Towers' best-selling products.

» Dan is a big fan of both the N64 and *Super Smash Bros.*

retro GAMER

next month

>> LOAD 134

ON SALE 9 OCTOBER 2014

Featured in this issue

Gaming's Scariest Moments

■ Readers and developers reveal the moments that scared them to death

The Collectors

■ We investigate the collecting scene and ask what drives people to collect certain systems

Saturn

■ It may have been overwhelmed by the sheer sales of Sony's PlayStation, but there's still plenty to love about Sega's console

More inside

- Soft Aid
- Alien Crush
- Commodore 128
- Origin Systems
- Desert Strike
- Wasteland

HOLY VIDEOGAMES!

BATMAN

AS THE CAPED CRUSADER TURNS **75** WE SPEAK TO THE DEVELOPERS BEHIND HIS GREATEST DIGITAL ADVENTURES

GAMES WORLD

The Video Games Specialist

1000s of retro and modern video games
in stock and ready to ship within 24 hours!

Free delivery on all UK orders
Great international postage rates

5% off your first order using code
"**RetroGamer5**" at the checkout

We also buy your game collections,
large or small, at great prices

Get in touch!
Twitter: @gamesworldbod
Facebook: facebook.com/gamesworldbodmin
email: sales@gamesworldbodmin.co.uk

www.gamesworldbodmin.co.uk

RETRO TOWERS.COM
www.retrotowers.co.uk

EVERDRIVES

Play games on an SD Card
with your original systems.

Shop Now

RETRO TOWERS.COM

Save 5% Coupon Code:

retrozine

retro gaming cables .co.uk

Quality audio video cables made in Great Britain

RGB SCART Cables available for:
- Sega Mega Drive 1 & 2
- Nintendo SNES (PAL & NTSC)
- SNK Neo Geo AES & CD/CDZ
- BBC Acorn Micro
- Sinclair ZX Spectrum + 128k, +2 & QL
- Atari STF, STE & STFM
- Amstrad CPC 464
- Various Arcade Jamma Superguns (Sigma, Pana, CMVS etc)

Plus many more on our website

RGB SCART cable key features:
- Vast improvement over traditional RF, composite video and s-video
- Pixel clear RGB video
- Improved sound quality
- No more tuning
- SCART TV plug & Play
- Compatible with up-scaling units i.e. Framemeister Mini XRGB

Buy direct from www.retrogamingcables.co.uk/store
FREE UK Delivery

CHILLOUT GAMES

we value your games

www.chilloutgames.co.uk/SellGames.aspx

review centre since 1st 2005

We Pay:

£127.31

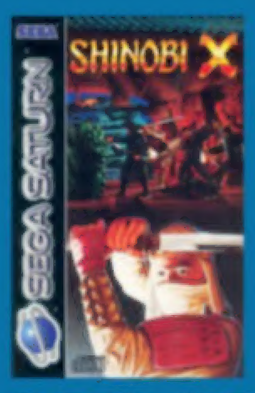
£20.41

£32.18

-RAPID PAYMENT

-GREAT PRICES

-FREE COURIER



£21.12

£26.34

£63.43

Prices valid as at 10th September 2014. Prices subject to change on a daily basis. Chillout Games and retro-games.co.uk are trading names of Chillout Games Ltd. Prices are for shop credit - 12% more than PayPal. T&Cs at www.chilloutgames.co.uk.

To advertise in

retro GAMER

Contact us on

01202 586442

adinfo@imagine-publishing.co.uk

MUTANT CATERPILLAR GAMES

... SINCLAIR ... COMMODORE ... ACORN ...

MACHINES

REPAIRS

HARDWARE

10% your first order when you use discount code "retrogc1" OFF

SOFTWARE

ALL OUR STOCK IS TESTED, WORKING AND GUARANTEED

FREE UK inland postage - excellent international postage rates

www: www.mutant-caterpillar.co.uk email: sales@mutant-caterpillar.co.uk

ebay: mutant-caterpillar tel: 01970 625441

... AMSTRAD ... ATARI ... ANYTHING ELSE!

ENDGAME

POWER STONE

» Capcom's brawler was a breath of fresh air when it arrived in 1999. Freed from the restrictive template that one-on-one fighters had employed since the days of Heavyweight Champ, Power Stone's fighters could move freely within 3D environments, hanging from ceilings and chucking barrels at one another to gain control of the titular magical artefacts

01

» With Valgas vanquished, Jack has finally gained control of what he came for – the Power Stone. Helpfully recapping the plot for those of us who haven't been paying attention, he explains that the magical jewel grants its owner any wish.

02

» Another image of Jack rises up as he makes his wish, leading us to wonder what kind of diabolical wish he could be making. He also begins his maniacal giggle, as is legally mandated under the Cartoon Villains Act 1962.

03

» Suddenly... he's been arrested? Jack the Slayer appears to have turned himself in or been caught, in a manner rather unlike the real-life serial killer Jack the Ripper. What an idiot – he didn't need the Power Stone for that!

04

» The citizens of Manches are rather pleased to see the bandaged freak behind bars – he's been terrorising them for a long time. They finally feel free to talk the streets again, knowing that the town's only criminal is incarcerated. Fools! If only they were aware of the truth...

05

» That second Jack wasn't another image – it was a clone, and the original is free to enjoy his hobby of murdering innocent people. That's your fault, player. By completing the game with Jack, you're essentially an accessory to murder. You could have picked Falcon, but no. How do you sleep at night?

Featuring REPLAY ... Europe's BIGGEST EVER Retro Gaming Event!

250 Arcade & Pinball Machines • Over 400 Retro Consoles & Computers
UK Classic Gaming Championships • Industry Legends • Retro Traders

EventCity MANCHESTER

PLAY EXPO

11th/12th OCTOBER 2014
MANCHESTER
WWW.PLAYEXPO.NET

NEW RELEASES • TOURNAMENTS • RETRO • FILM & TV
LAN GAMING • ARCADE MACHINES • PINBALL • COSPLAY • INDIE GAMES

Relive your memories of Commodore

To get your hands on a piece of history, visit www.bitmapbooks.co.uk

Amiga book
Kickstarter campaign launches on 13th October

C64 book
To get your copy, visit bitmapbooks.co.uk

These beautifully designed books celebrate the beauty of the greatest home computers ever made; the C64 and Amiga.
Printed to the highest possible standards and featuring contributions from industry legends such as Jeff Minter, Jon Hare, David Crane, Martin Walker, Ron Gilbert and loads more...

BITMAP BOOKS

GAMES YOU LOVED .com

MADE IN CREATIVE UK

KICKSTARTER